

Joint Workplan

for the 1979-80

San Francisco Bay Areawide Water Quality Management Program

March 1979

Prepared by the staff of the
Association of Bay Area Governments

in cooperation with the staff of the
California Regional Water Quality Control Board, San Francisco Bay Region

Joint Workplan

for the 1979-80

**San Francisco Bay
Areawide Water Quality
Management Program**

March 1979

Prepared by the staff of the
Association of Bay Area Governments

in cooperation with the staff of the
California Regional Water Quality Control Board, San Francisco Bay Region

TABLE OF CONTENTS

	<u>PAGE</u>
I. INTRODUCTION	1
Background	1
Program Goals	1
Water Quality Problems and Planning Issues	1
II. APPROACH AND EXECUTIVE SUMMARY	3
III. WORKPLAN	8
Problem Definition	9
Control Measure Development and Surface Runoff Program	15
Plan Integration and Approval	95
Plan Implementation	107
Workplan Organization	121
Summary of Products	123
IV. SCHEDULE	125
V. PROGRAM ORGANIZATION	154
VI. BUDGET	156
APPENDICES	
A. Remaining Tasks of Proposed 1979 Workplan	A-1

2017000876 1

frequency
of the
present
group of individuals in the
sample

sample estimates the probability

of occurrence

of individuals in the
sample with the
present
frequency
and
probability
of occurrence

of occurrence

of the
present
group of individuals

of occurrence

of the
present
group of individuals

I. INTRODUCTION

BACKGROUND

The Association of Bay Area Governments (ABAG) was designated in May, 1975 by the State Water Resources Control Board (SWRCB) as the areawide planning agency (208 agency) pursuant to the Federal Water Pollution Control Act Amendments of 1972. Subsequently, a water quality management plan (208 plan) was prepared by ABAG as a part of the Environmental Management Plan (EMP) for the San Francisco Bay Region. The initial 208 plan was adopted by the State Water Resources Control Board (SWRCB) with qualifications in September, 1978. The EPA approved with qualifications, the State adopted portions on 14 February 1979.

In order to continue the planning process for water quality management after the initial plan approval, the SWRCB requires that a joint workplan should be prepared by ABAG and the Regional Water Quality Control Board (RWQCB), San Francisco Bay Region.

This document represents the joint workplan developed over a period of nine months by the staffs of ABAG and the RWQCB. A draft version was sent to the State Clearinghouse for interagency review in November 1978. Public notice also was given in November 1978 of the availability of copies for review and comment. Subsequent negotiations among ABAG, EPA and the State resulted in the elimination of low priority activities and some clarification of other tasks in the workplan.

PROGRAM GOALS

The goals of the continuing planning process are the same as those of the initial environmental Management Plan:

1. To lead to the greatest possible improvements in water and air quality and reduction in problems caused by solid waste.
2. To lead to compliance with Federal and State standards and objectives at the earliest possible date.
3. To be implementable--that is to have no social, economic or environmental effects so unacceptable that the plan cannot be carried out.

WATER QUALITY PROBLEMS AND PLANNING ISSUES

In order to achieve the above goals, this workplan addresses three types of sources of water quality problems:

- o point sources
- o miscellaneous sources
- o surface runoff

In addition, the workplan also includes activities to maintain, review and update ongoing water quality management planning efforts.

The following is a list of the major water quality problems or planning issues proposed for investigation during the first year of the continuing planning process. These problems or planning issues have been identified by ABAG in the development of the initial Environmental Management Plan and/or by the SWRCB and the RWQCB.

- o Provision of accurate and current population and wastewater flow projections.
- o Update and integration of water quality plans.
- o Adequacy of existing surface runoff control programs.
- o Poorly defined interrelationships of factors affecting the aquatic habitat of the San Francisco Bay-Delta system.
- o Impairment of shellfishing as a beneficial use.
- o Inconsistent regulation of individual waste treatment and disposal systems.
- o Disposal of hazardous materials.
- o Implementation of plan recommendations and control measures.

A detailed discussion of all the workplan tasks is included in Section III.

II. APPROACH AND EXECUTIVE SUMMARY

The initial Environmental Management Plan addressed water quality problems in substantial detail but resulted in limited control measures for correcting those problems. Miscellaneous sources of pollution received attention as did ongoing efforts for municipal and industrial point-source control. However, due to their complex and little-industrial nature, surface runoff pollution problems and effects of low-level toxicants could not be fully dealt with in the initial plan. The SWRCB proposes to undertake a program that would coordinate and redirect research and monitoring activities in the San Francisco Bay Area. A principal objective of this program is to resolve questions of chronic and low-level toxicity upon aquatic organisms. The surface runoff control problems are a principal focus of this workplan as explained below. This workplan also contains other tasks necessary for a comprehensive water quality planning program. All of these tasks result from extended negotiations among ABAG, the RWQCB, SWRCB and EPA over those tasks originally proposed in the November 1978 draft workplan.

Summary of Activities

The workplan is divided into four major groups of activities: problem definition, control measure development, plan integration and approval, and plan implementation. The emphasis of the workplan is on control measure development and particularly the surface runoff program.

Problem Definition

Tasks within this category seek to improve our understanding of the pollution problems in the Bay-Delta system. Areas for investigation were directed by the Environmental Management Plan (EMP) or were designated by the State Water Resources Control Board (SWRCB) staff as an item of state concern. Areas proposed for investigation include:

- o Population and land use projections
- o Coordination of water supply and water quality planning
- o Organization of the San Francisco Bay-Delta aquatic habitat data collection
- o Hazardous waste disposal needs

Control Measure Development

The Environmental Management Plan and the Basin Plan are extensive documents for environmental pollution control. However, certain problems of water pollution have not been resolved. These include areas which were only identified in the plans, with control measures yet to be developed, and problems beyond the scope of the original planning

effort. In addition, certain elements such as water quality standards must be periodically reviewed and updated in the Basin Plan.

Information gathered in the preceding phase would be used to develop pollution control measures. In some instances, data collected in the initial EMP effort would also be used in control measure development. Four major sets of control measures would result:

- o Surface runoff control measures for urban and rural areas
- o Revised water quality standards
- o Measures for controlling point sources of pollution such as municipal or industrial discharges
- o Measures for controlling miscellaneous sources such as on-site disposal.

Environmental assessment of proposed control measures would be concentrated in this phase of plan development.

The surface runoff control activities will concentrate on three groups of tasks:

a) Coordination of the surface runoff program

The importance of regional and intra-county program coordination cannot be overemphasized. Surface runoff is a complex region-wide problem which affects and is affected by all jurisdictions in the nine counties of the Bay Area. ABAG will continue to administer the program which involves the active participation and coordination of county lead agency staff and federal agencies. Meetings will be held on a regular basis to discuss the continuing planning process.

b) Evaluation of existing ordinances and enforcement practices affecting surface runoff and development of improvements.

Nearly all local governments in the Bay Area have ordinances and perform control practices which affect or could affect surface runoff. Many of these ordinances and control practices were not designed to control water pollution. In addition, certain water quality problems are not addressed by existing policies, regulations or practices.

This second group of tasks is designed to build on the inventory work completed during the initial planning process. Key ordinances in all jurisdictions in the region which affect surface runoff will be analyzed. Modifications to improve their effectiveness for water pollution control will be developed where indicated. New policies, ordinances or control measures will be proposed to address those water

quality concerns not covered by existing regulations or practices.

c) Review and evaluation of existing control measures which affect surface runoff and development of program to increase their effectiveness.

This third group of tasks focuses on two major surface runoff issues in the Bay Area: polluted urban lakes and erosion from developing and rural watersheds. Urban lakes and recreational lagoons are some of the most heavily used water bodies in the region. Continued usage of many of these lakes is threatened by pollution caused by surface runoff. This work program has identified three such urban lakes for detailed analysis and development of specific pollution control programs: Lake Merritt, Lake Temescal and the San Mateo Lagoon.

Erosion and siltation is a widespread surface runoff problem that occurs throughout the region, primarily in rural areas and in areas where new construction has occurred. Erosion was reported as a problem in all eight county surface runoff plans. Several counties have selected watersheds with previously identified erosion problems for detailed analysis and development of specific control problems.

Program Schedule

This workplan will be submitted to EPA by March 15, 1979 for approval. The SWRCB will hold hearings on statewide allocations of 208 grant money on March 20, 1979. At this time, EPA has approved a grant award covering 75 percent of the workplan. The balance would be subject to the results of the SWRCB hearings.

This workplan is developed on the basis of EPA workplan approval in early April 1979. Certain tasks may be approved by EPA before the entire workplan is completed. These tasks would generally be those needing an extended time period in order to adequately complete all activities and some may be related to activities during the current rainy season.

The program schedule calls for the completion of most tasks by February and March of 1980. Recommendations for the EMP would be submitted to the RPC in April 1980, the Executive Board in May 1980, and the General Assembly in June, 1980.

Program Organization

Major responsibilities for carrying out this joint workplan will be assigned to ABAG, the Regional Water Quality Control Board, SWRCB, the counties of the Bay Area, and consultants. Specific assignments are listed in the task descriptions.

ABAG and the Regional Board will conduct joint staff meetings on a regular basis so that work progress on all tasks can be reviewed, issues can be discussed and strategies for completing the work can be prepared. In addition, the Regional Board will continue to attend the surface runoff meetings conducted by ABAG and the county lead agencies.

There are also other participants which play a role in the planning process. For example, the Water Quality Technical Advisory Committee and the Projections Technical Advisory Committee will continue to provide technical assistance in plan development. A major public participation effort will be undertaken so that affected citizens will have the opportunity to be part of the decision making process.

The end result of this planning process will be a number of control measures to be implemented by the responsible agencies in order to solve the remaining water quality problems in the bay region.

Budget

The workplan budget totals \$900,000. It does not include the supporting activities of the RWQCB which would be funded directly from the SWRCB. It also does not include ABAG participation in several tasks to be administered by the SWRCB and additional activities requested by EPA but not approved during negotiations on the draft joint workplan.

The proposed budget distribution is summarized as follows:

<u>Category</u>	<u>Amount, \$1000</u>	<u>Percent</u>
Problem Definition	43.0	5
Control Measure Development	543.2	55
Plan and Approval Integration	220.5	25
Plan Implementation	93.3	15
Total	900	100

Of the \$900,000 budget total, \$675,000 would be provided by a Federal grant and \$225,000 must be raised as a local match. The following distribution by major program participants helps to clarify local match requirements:

<u>Participant</u>	<u>Grant Funds, \$</u>	<u>Local Match, \$</u>	<u>Total, \$</u>
ABAG	381,525	127,175	508,700
Alameda County	81,375	27,125	108,500
Contra Costa County	9,000	3,000	12,000
Marin County	33,000	11,000	44,000
Santa Clara County	55,500	18,500	74,000
San Mateo County	55,125	18,375	73,500
Solano County	26,250	8,750	35,000
Bay Area Council of Resource Conservation Districts	33,225	11,075	<u>44,300</u>
			900,000

III. WORKPLAN

This section describes the individual task elements that comprise the joint ABAG/RWQCB workplan. These elements have been grouped into four distinct phases of plan development: problem definition, control measure development, plan integration and approval and plan implementation. These tasks also may be considered the highest priority activities for water quality planning in the Bay Area. The draft workplan contained other tasks which were of lower priority. Due to funding limitations, these other tasks could not be performed in 1979-80. If additional funds become available during the continuing planning process, additional tasks identified in the draft workplan may be performed upon the agreement of ABAG and EPA. Appendix A lists these additional tasks and their level of priority.

Problem Definition Work Tasks

Problem Definition

Tasks within this category seek to improve our understanding of the pollution problems in the Bay-Delta system. Areas for investigation were directed by the Environmental Management Plan (EMP) or were designated by the State Water Resources Control Board (SWRCB) staff as an item of state concern. Areas proposed for investigation include:

- o Population and land use projections
- o Coordination of water supply and water quality planning
- o Organization at the San Francisco Bay-Delta aquatic habitat data collection
- o Hazardous waste disposal needs



Task 1

Update Population, Land use and Economic Projections.

Background

Accurate population, land use and economy projections are the foundation of environmental planning. ABAG's Series 3 projections must be refined and updated more as demographic data become available and local policies change.

Approach

ABAG staff will collect data on changes in local policies, information on industrial siting plans, etc, and modify the projections accordingly. Conflicts between ABAG and local agencies projections will be resolved at staff meetings. Projections will be disaggregating to sewer service areas as required by SWRCB Resolution No. 78-56 and used by the RWQCB to develop waste flow/load estimates.

Responsible Agencies, Budget & Schedule

ABAG: 10.3 person-months (\$36,000)

Annually updated projections:

Start date: March 1979

Completion: June 1979

Start date: January 1980

Completion: June 1980

Product

Updated projections of population aggregated by sewer service areas.

Task 2

Coordinate Water Supply and Water Quality Planning.

Background

The EMP requires formation of a regional water resources council consisting of major water agencies.

Approach

The Bay Area Water Resources Council has been formed by water supply agencies. ABAG will participate in future meetings as information source and in advisory capacity. ABAG may be required to adjust portions of the Water Quality Management Plan. As a related activity, ABAG would participate in the San Francisco Bay Area Regional Municipal Wastewater Reclamation Study. ABAG currently has members on the Policy Board and Staff Review Committee.

Responsible Agencies, Budget & Schedule

ABAG: 2 person-months (\$7,000)

Start date: May 1979

Completion date: Continuous

Product

Meetings, technical information exchange, consistency between water supply planning and the Water Quality Management Plan.

Task 3

Participate in the Planning of a Program of Data Collection and Problem Assessment of San Francisco Bay/Delta Aquatic Habitat.

Background

Major concerns have been raised over the impacts of reduced Delta outflow on the ecological integrity of San Francisco Bay. Concerns have also been raised over the impacts of urban runoff and of a proposed agricultural drainage discharge to the Bay/Delta. Water quality impacts of improved point source treatment have not been fully determined. In order to provide better coordination and to advise and assist the Regional Board, State Board, and others in their water quality monitoring and research activities, the San Francisco Bay Delta Advisory Council will be formed as required by the EMP.

Approach

Tentatively, the SWRCB would be responsible for development of a data collection/problem assessment program to determine:

- o Delta outflow impacts on S.F. Bay.
- o Delta winter flows for long-term habitat protection.
- o Impact of storm water runoff on S.F. Bay.
- o Impact of the agricultural drain discharge on S.F. Bay.
- o Water quality improvements resulting from improved point source treatment.
- o Integration of existing water quality data management systems.
- o Direction of future water quality related data collection or research programs.

A final workplan for this task has not been established by the SWRCB or approved by ABAG and the EPA. However, ABAG would participate in the San Francisco Bay Delta Advisory Council and possibly other portions of the program.

Responsible Agencies, Budget and Schedule

ABAG: 3 person-months (\$10,500) for participation on advisory council. The SWRCB proposes to administer this program and associated funding. The ABAG participation budget is contingent upon allocation of funds from this program and is not included in the workplan budget.

Start date: May 1979 (tentative)

Completion date: Continuous

Product

Coordinated effort in monitoring and estuarine research to determine impacts on aquatic habitat of San Francisco Bay-Delta System; improved basis for control measure development; data management system producing readily available water quality data. (Tentative)

Task 4

Determine Hazardous Waste Disposal Needs.

Background

Large quantities of hazardous wastes are generated in the Bay Area. Inadequate disposal of such wastes may result in significant surface and groundwater quality problems caused by contaminated runoff and leachate. Therefore, it is necessary to determine whether or not additional hazardous waste disposal sites are needed in the Bay Area.

Approach

Staff will refine the estimates of current and projected quantities of hazardous wastes included in the initial EMP. The refinement of estimates will be based on the hazardous industrial waste survey to be done by the State Department of Health Services. ABAG staff will also determine the disposal capacity of existing sites. ABAG will then make recommendations on the need for additional sites.

If new sites are needed, ABAG will convene affected counties to determine site areas for further study and to develop necessary intergovernmental and public-private arrangements for financing studies and site reservation and/or acquisition. (ABAG has already identified general site areas in the EMP supporting document.)

Responsible Agencies, Budget and Schedule

ABAG: 5 person-months (\$17,500)

Since this task is intended as support to a SWRCB proposed activity and is dependent upon the State's program, it will be implemented only if funded by the SWRCB.

Start date: Undetermined; depends upon SWRCB program.

Completion date: By June 1980

Product

Recommendations for future hazardous waste disposal site capacity and location by county. Such recommendations will be forwarded to the SWRCB, RWQCB, SSWMB, counties and other affected agencies for appropriate actions.

Control Measure Development Work Tasks



Control Measure Development

The Environmental Management Plan and the Basin Plan are extensive documents for environmental pollution control. However, certain problems of water pollution have not been resolved. These include areas which were only identified in the plans, with control measures yet to be developed, and problems beyond the scope of the original planning effort. In addition, certain elements such as water quality standards must be periodically reviewed and updated in the Basin Plan.

Information gathered in the preceding phase would be used to develop pollution control measures. In some instances, data collected in the initial EMP effort would also be used in control measure development. Four major sets of control measures would result:

- o Surface runoff control measures for urban and rural areas
- o Revised water quality standards
- o Measures for controlling point sources of pollution such as municipal or industrial discharges
- o Measures for controlling miscellaneous sources such as on-site disposal.

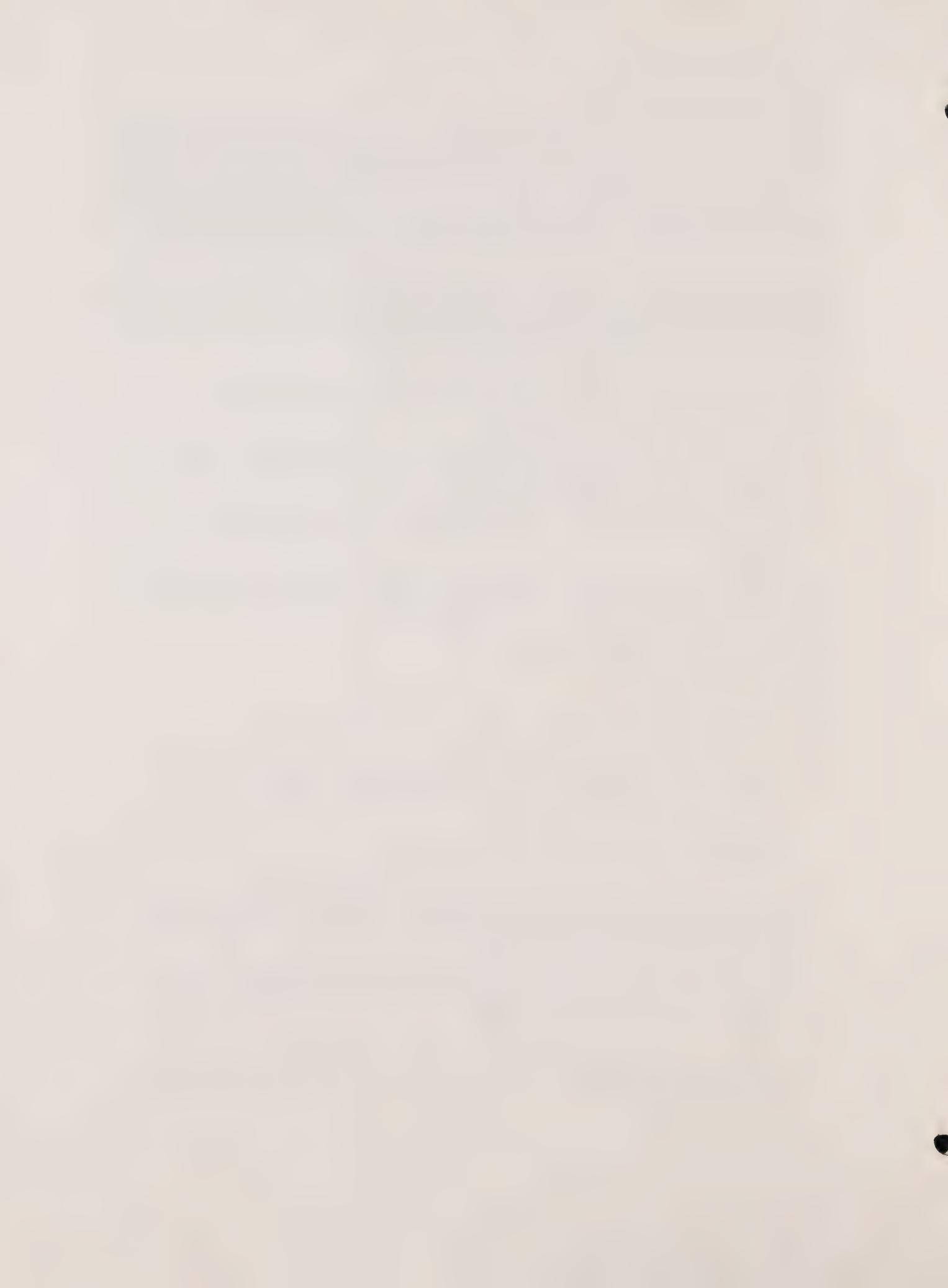
Environmental assessment of proposed control measures would be concentrated in this phase of plan development.

Surface Runoff Management Program

Goal and Objectives

The goals of the surface runoff management program are to:

- o Improve the water quality of the Bay Area's streams and lakes and the Bay itself to the maximum practicable extent.
- o Comply with Federal and State water quality standards and objectives.
- o Realize the existing and potential beneficial uses of the surface waters identified in the Water Quality Control Plan for the San Francisco Bay Basin.
- o Raise the awareness of decision-makers and residents of the Bay Area concerning the nature, causes and control of the region's water quality problems.
- o Implement procedures for continuing consideration of water quality issues in all phases of local government decision-making.



- o Have local government develop and implement policies, regulations and enforcement procedures sufficient to achieve the long-term water quality objectives.

The 1979/80 work program has the following short-term objectives:

- o Improve understanding of effects of control measures on water quality.
- o Improve understanding of relationships between rainfall, land use and surface runoff.
- o Develop control programs to improve the quality of and increase public usability of several high use urban lakes.
- o Begin to reduce erosion and sedimentation problems by demonstrating the ability of local government policies and regulations to control erosion and sedimentation in key problem watersheds in the region.
- o Improve the ability of city and county ordinances, regulatory procedures and control measures to reduce pollution from surface runoff, with emphasis on erosion control.
- o Improve intra-county coordination in water quality planning and implementation including:
 - county/RCD coordination
 - county/city coordination
 - county inter-departmental coordination
 - city inter-departmental coordination
 - county/special district coordination
- o Achieve a higher level of understanding about land use/surface runoff relationships among local government officials and the public.
- o Integrate water quality considerations into all phases of local government decision-making.
- o Improve inter-county coordination through information sharing and regionally coordinated local policy development.

Approach

The proposed 1979/80 Work Program is composed of tasks aimed at fulfilling the short-term objectives. This Work Program will continue the process developed during the initial planning effort. The major emphasis will be on refining and augmenting local government policies, ordinances, enforcement, and control measure practices to make them consistent with the achievement of water quality standards and objectives.

The proposed work can be divided into three groups of tasks:

- (a) Coordination of the surface runoff program at the regional and local levels.
- (b) Evaluation of existing ordinances and enforcement practices affecting surface runoff and development of improvements.
- (c) Review and evaluation of existing control measures which affect surface runoff and development of programs to increase their effectiveness.

The following is a brief description of the three groups of tasks.

a) Coordination of the surface runoff program

The importance of regional and intra-county program coordination cannot be overemphasized. Surface runoff is a complex region-wide problem which affects and is affected by all jurisdictions in the nine counties of the Bay Area. ABAG will continue to administer the program which involves the active participation and coordination of county lead agency staff and federal agencies. Meetings will be held on a regular basis to discuss the continuing planning process. ABAG will provide guidance and assist local governments through:

- o development of uniform standards for evaluating problems, ordinances, control measures and implementation
- o dissemination of technical information and new federal and state policies and guidelines
- o applying detailed knowledge gained in one specific area to similar areas
- o continuing technical analysis through demonstration projects
- o workshops, program guidance memoranda, issue papers and public education materials
- o reviewing county programs and integrating with the existing plans.

Intra-county coordination activities to be conducted by the counties will include:

- o liaison with city governments, RCD's, special districts and other county departments

- o regular meetings of county advisory committees
- o seeking management agreements with designated implementing agencies
- o developing work programs for continuing planning and funding sources for plan implementation

b) Evaluation of existing ordinances and enforcement practices affecting surface runoff and development of improvements.

Nearly all local governments in the Bay Area have ordinances and perform control practices which affect or could affect surface runoff. Many of these ordinances and control practices were not designed to control water pollution. In addition, certain water quality problems are not addressed by existing policies, regulations or practices.

This second group of tasks is designed to build on the inventory work completed during the initial planning process. Key ordinances in all jurisdictions in the region which affect surface runoff will be analyzed. Modifications to improve their effectiveness for water pollution control will be developed where indicated. New policies, ordinances or control measures will be proposed to address those water quality concerns not covered by existing regulations or practices.

The overall effort in this task will be directed toward identifying and implementing least-cost best management practices to control surface runoff pollution.

c) Review and evaluation of existing control measures which affect surface runoff and development of program to increase their effectiveness.

This third group of tasks focuses on two major surface runoff issues in the Bay Area: polluted urban lakes and erosion from developing and rural watersheds. Urban lakes and recreational lagoons are some of the most heavily used water bodies in the region. Continued usage of many of these lakes is threatened by pollution caused by surface runoff. This work program has identified three such urban lakes for detailed analysis and development of specific pollution control programs: Lake Merritt, Lake Temescal and the San Mateo Lagoon. Activities in the urban lakes tasks will generally include the following:

- o determination of the sources of the pollution in the lakes and their relative magnitude
- o development of detailed alternative measures to control the problems

- o assessment of the costs, impacts and effectiveness of the alternative measures
- o seeking of commitments to implement the recommended measures
- o coordination of the control program with the rest of the surface runoff program
- o consideration of the applicability of the control program to other areas in the region

Erosion and siltation is a widespread surface runoff problem that occurs throughout the region, primarily in rural areas and in areas where new construction has occurred. Erosion was reported as a problem in all eight county surface runoff plans. Several counties have selected watersheds with previously identified erosion problems for detailed analysis and development of specific control problems. Activities undertaken in these case studies will typically include:

- o determination of the source areas of erosion and their relative magnitude
- o identification of existing policies, ordinances, and administrative procedures which relate to erosion control in the study areas
- o assessment of the effectiveness of these measures in controlling the problem
- o recommendations to improve the existing regulations and practices where indicated
- o procedures to control problems not currently dealt with
- o consideration of the applicability of the watershed control program to other areas in the region
- o seeking of commitments to implement the recommendations

The case study approach outlined for this third task group is expected to yield the following results:

- o completion of an entire cycle of detailed planning from problem identification to implementation
- o development of detailed information about costs and effectiveness of control measures which will facilitate applications to other areas
- o commitments to implement certain recommendations and

identification of barriers to implementation of others

- o specific requirements for further study which will enable broader implementation of effective surface runoff control programs

Table III-1 summarizes the major activities of the above three groups of tasks and their relationship with the 1976-78 program tasks.

TABLE III - 1

SUMMARY OF 1979/80 SURFACE RUNOFF WORK PROGRAM TASKS AND ACTIVITIES

<u>Major Tasks in the 1979/80 Workplan</u>	<u>Relationship with 1976/78 Program Tasks</u>	<u>Activities of the Major Tasks in 1979/80 Workplan</u>
5. Coordinate regional surface runoff program	<p>The structure for regionwide coordination was set up during the first two years. It included the following two committees:</p> <ul style="list-style-type: none"> o a working committee composed of county lead agency staffs. o a regionwide advisory committee composed of members of regional, state, and federal agencies and representatives of special interest groups. <p>The committees had functioned very well in the past two years. Therefore, ABAG will continue the regional coordination through the established committees and will provide necessary guidance and technical assistance to the counties in conducting the surface runoff program.</p>	<p>Development of uniform standards for evaluating problems, ordinances, control measures and implementation.</p> <p>Dissemination of technical information and new federal and state policies and guidelines.</p> <p>Applying detailed knowledge gained in one specific area to similar areas.</p> <p>Continuing technical analysis through demonstration projects.</p> <p>Workshops, program guidance memoranda, issue papers and public education materials.</p> <p>Reviewing county program, and integrating with the existing plans.</p>
6. Coordinate Alameda Co. surface runoff program.	<p>The county lead agencies had coordinated the surface runoff planning activities within the counties in the past. Coordination activities included:</p> <ul style="list-style-type: none"> o Formation and meetings of county surface runoff advisory committees. o Meetings between county lead agency staff and other local agencies throughout counties. o Presentations before city councils and other public meetings. o County citizen round table discussions. o Development of informational brochures and slide shows on surface runoff. <p>Similar activities will be performed by the county lead agencies in 1979.</p>	<p>Liaison with city governments, RCD's special districts and other county departments.</p> <p>Regular meetings of county advisory committees.</p> <p>Seeking management agreements with designated implementing agencies.</p> <p>Developing work programs for continuing planning and funding sources for plan implementation.</p>
7. Coordinate Contra Costa Co. surface runoff program.		
8. Coordinate Marin Co. surface runoff program.		
9. Coordinate San Mateo Co. surface runoff program.		
10. Coordinate Santa Clara Co. surface runoff program.		
11. Coordinate Solano Co. surface runoff program.		

TABLE III - 1 (continued)

<u>Major Tasks in the 1979/80 Workplan</u>	<u>Relationship with 1976/78 Program Tasks</u>	<u>Activities of the Major Tasks in 1979/80 Workplan</u>
12. Improve surface runoff related ordinances region-wide.	In the past two years, the counties had identified certain surface runoff problems and had completed an inventory of existing city and county ordinances which could affect surface runoff controls. Based on this previous work, the effectiveness and enforcement practices of existing ordinances will be evaluated and improvements will be proposed.	Detailed analysis of both ordinances and enforcement practices regionwide.
13. Develop model watercourse protection ordinance.		Identification of key features of ordinances with greatest potential to effect surface runoff quality and quantity.
14. Improve EIR process to reduce construction erosion.		Model ordinances and model enforcement practices and improvement to existing ones to increase effectiveness in water quality management.
15. Incorporate BMP's into development review process.		Adoption of these ordinances and commitments to implement.
16. Improve erosion control ordinances in Santa Clara County.		
17. Improve surface runoff related ordinances in Solano County.		
18. Evaluate and improve surface runoff control measures regionwide.	The initial surface runoff program included a preliminary survey of existing city and county control measures practices. The counties also completed a screening of a list of potential control measures prepared by ABAG. The 1979 task will be based on the results of the preliminary survey. Existing and potential control measures will be analyzed and programs will be developed to increase the effectiveness of control measures.	Detailed examination of selected control measures (both in practice and potential).
20. Evaluate and improve public works practices.		On-site evaluation of control measure performance.
26. Review and improve agricultural and erosion control practices in Santa Clara Co.		Quantification of extent of application of existing practices region-wide (e.g., number of curb miles swept, type of equipment used, frequency of sweeping and litter pick-up, cost for existing programs).
28. Evaluate and improve surface runoff control measures in Solano Co.		Recommendations for specific modifications to existing practices to increase their effectiveness - including estimation of expected effect on water quality.
42. Develop implementation plan for rural BMP's		Quantification of cost of making above modifications.
		Evaluations of institutional factors affecting implementation of changes.
		Assessment of other impacts (environment, social).
		Seeking of implementation of recommended improvements.
		Close communication between project staff and affected agencies and property owners.

TABLE III - 1 (continued)

<u>Major Tasks in the 1979/80 Workplan</u>	<u>Relationship with 1976/78 Program Tasks</u>	<u>Activities of the Major Tasks in 1979/80 Workplan</u>
19. Coordinate urban lakes programs.		Urban Lakes:
21. Develop pollution control plan for Lake Merritt.	Problem identification phase of initial plan development identified Lake Merritt, Lake Temescal, Cull Canyon, Nicasio Valley, Pescadero, Denniston and Calabazas Creek watersheds as priority problem areas where further work is required.	Determination of the sources of the pollution in the lakes and their relative magnitude.
22. Develop erosion control plan for Cull Canyon.		Development of detailed alternative measures to control the problems.
23. Develop water quality protection plan for Nicasio Valley.		Assessment of the costs, impacts and effectiveness of the alternative measures.
24. Develop erosion control plan for Pescadero Creek watershed.		Seeking of commitments to implement the recommended measures.
25. Develop pollution control plan for San Mateo Lagoon.		Coordination of the control program with the rest of the surface runoff program.
27. Develop erosion control plan for Calabazas Creek watershed.		Consideration of the applicability of the control program to other areas in the region.
		Rural Watersheds:
		Determination of the source areas of erosion and their relative magnitude.
		Identification of existing policies, ordinances, and administrative procedures which relate to erosion control in the study areas.
		Assessment of the effectiveness of these measures in controlling the problem.
		Recommendations to improve the existing regulations and practices where indicated.
		Procedures to control problems not currently dealt with.
		Consideration of the applicability of the watershed control program to other areas in the region.
		Seeking of commitments to implement the recommendations.

Task 5

Coordinate Regional Surface Runoff Program and Provide Technical Assistance to Counties.

Background

The surface runoff activities of the eight counties, RCD's, Project Consultants and Advisory Committee members need to be coordinated and administered. ABAG staff must perform these functions. Secondly, county and city staff frequently request technical assistance from ABAG on issues pertaining to development of their Surface Runoff Plans (e.g., setting up monitoring programs, applying models, interpreting regulations, administrative procedures, etc.). ABAG staff must be available to respond to these requests from cities and counties. In addition, a considerable amount of technical literature is published each year by EPA, USGS, other government agencies, universities, consultants and private research groups. New Federal and State regulations are issued periodically which pertain to surface runoff and water quality. New funding sources become available which could potentially fund surface runoff programs. This information needs to be compiled and made available to the counties to assist development of the surface runoff plans.

Approach

ABAG staff will conduct the meetings of the Surface Runoff Advisory Committee (including County lead agency staff), supervise completion of tasks in continuing planning process, administer contracts with counties, RCD's and consultants, prepare meeting summaries and agenda materials and mail to committee members, respond to city and county requests for information, meet with staff of individual local government agencies, collect and review documents pertaining to surface runoff, disseminate important documents to counties, prepare technical memoranda and issue papers, conduct informational workshops as appropriate.

Responsible Agencies, Budget & Schedule

ABAG: 10 person-months (\$35,000)

Start date: January, 1979

Completion date: Continuous through June, 1980

Product

Meetings, meeting summaries, agenda packets, contracts, technical memoranda, issue papers, workshops, documents and assistance to local governments.

Regional Water Quality Board Support to Task 5

Approach

The Regional Board will provide support to the Regional Surface Runoff Program through participation in meetings, workshops, and assist ABAG as appropriate.

Responsible Agency, Budget and Schedule

RWQCB - 1 person-month

Start date: April, 1979

Completion date: Continuous through June, 1980

This activity is to be funded separately by the State Water Resources Control Board.

Task 6

Coordinate Alameda County Surface Runoff Program

Background

A County Surface Runoff Management Plan was developed during the initial planning period. To ensure that the program continues to move forward, various administrative tasks must be performed or coordinated by the lead agency. Examples of the tasks are described below under "Approach."

Approach

The County lead agency staff will continue to carry out the following functions as necessary:

- o Administer the local surface runoff advisory committee - schedule meetings, prepare agendas and meeting materials, chair meetings, prepare minutes.
- o Gather and disseminate information regarding regional and local surface runoff planning and implementation activities.
- o Identify sources of funding for surface runoff planning, monitoring and implementation, and disseminate this information to local agencies.
- o Prepare or assist in the preparation of grant applications to fund surface runoff management activities called for in the plan.
- o Attend the meetings of the regional surface runoff advisory committee and do the necessary preparatory work.
- o Prepare recommendation for annual work program for surface runoff management activities in county and recommend modifications to County Surface Runoff Plan.
- o Prepare progress reports, financial reports, matching-fund documentation etc., as required.
- o Prepare annual report.
- o Assist in obtaining management agreements with implementing agencies.
- o Perform such other tasks as determined by ABAG or the regional surface runoff advisory committee that may be completed within the limitations of the County surface runoff budget.

Responsible Agencies, Budget and Schedule

Alameda County Flood Control District: 2.0 person months (\$6,000)

Start date: April, 1979

Completion date: Continuous through June, 1980

Product:

Meetings, progress reports, annual report, work program, informational packets, grant applications.

Task 7

Coordinate Contra Costa County Surface Runoff Program

Background

A County Surface Runoff Management Plan was developed during the initial planning period. To ensure that the program continues to move forward, various administrative tasks must be performed or coordinated by the lead agency. Examples of the tasks are described below under "approach."

Approach

The County lead agency staff will continue to carry out the following functions as necessary:

- o Administer the local surface runoff advisory committee - schedule meetings, prepare agendas and meeting materials, chair meetings, prepare minutes.
- o Gather and disseminate information regarding regional and local surface runoff planning and implementation activities.
- o Identify sources of funding for surface runoff planning, monitoring and implementation, and disseminate this information to local agencies.
- o Prepare or assist in the preparation of grant applications to fund surface runoff management activities called for in the plan.
- o Attend the meetings of the regional surface runoff advisory committee and do the necessary preparatory work.
- o Prepare recommendation for annual work program for surface runoff management activities in county and recommend modifications to County Surface Runoff Plan.
- o Prepare progress reports, financial reports, matching-fund documentation etc., as required.
- o Prepare annual report.
- o Assist in obtaining management agreements with implementing agencies.
- o Perform such other tasks as determined by ABAG or the regional surface runoff advisory committee that may be completed within the limitations of the County surface runoff budget.

Responsible Agencies, Budget and Schedule:

Contra Costa County Planning Department: 1.3 person months (\$4,000)

Start date: April, 1979

Completion date: Continuous through June, 1980

Product:

Meetings, progress reports, annual report, work program, informational packets, grant applications.

Task 8

Coordinate Marin County Surface Runoff Program

Background

A County Surface Runoff Management Plan was developed during the initial planning period. To ensure that the program continues to move forward, various administrative tasks must be performed or coordinated by the lead agency. Examples of the tasks are described below under "approach."

Approach

The County lead agency staff will continue to carry out the following functions as necessary:

- o Administer the local surface runoff advisory committee - schedule meetings, prepare agendas and meeting materials, chair meetings, prepare minutes.
- o Gather and disseminate information regarding regional and local surface runoff planning and implementation activities.
- o Identify sources of funding for surface runoff planning, monitoring and implementation, and disseminate this information to local agencies.
- o Prepare or assist in the preparation of grant applications to fund surface runoff management activities called for in the plan.
- o Attend the meetings of the regional surface runoff advisory committee and do the necessary preparatory work.
- o Prepare recommendation for annual work program for surface runoff management activities in county and recommend modifications to County Surface Runoff Plan.
- o Prepare progress reports, financial reports, matching-fund documentation etc., as required.
- o Prepare annual report.
- o Assist in obtaining management agreements with implementing agencies.
- o Perform such other tasks as determined by ABAG or the regional surface runoff advisory committee that may be completed within the limitations of the County surface runoff budget.

Responsible Agencies Budget and Schedule:

Marin County Planning Department: 1.3 person-months (\$4,000)

Start date: April, 1979

Completion date: Continuous through June, 1980

Product:

Meetings, progress reports, annual report, work program, informational packets, grant applications.

Task 9

Coordinate San Mateo County Surface Runoff Program

Background

There is a need to provide regular progress reports on surface runoff activities to participating organizations such as the City Manager's Association, the Regional Planning Committee, ABAG and the public in general. There is also a need to update or revise the Surface Runoff Plan annually, and there is a need for overall coordination of the County's 208 program.

Approach

The activities for this task will be essentially the same as those in Task 6 (coordinate Alameda County Surface Runoff Program).

Brief progress reports on the surface runoff program have been presented to the Regional Planning Committee and City Manager's Association in October, 1978 and February, 1979. Plan update or revision will be completed in June, 1979. The County Planning Division will be responsible for these activities as well as for continuing overall coordination and administration of the 208 program in San Mateo County. This will include participation in meetings and workshops at the Regional and State level, as well as all administrative tasks, such as recordkeeping, billing, etc. Adequate public participation in all aspects of the planning process will be assured.

Responsible Agencies, Budget & Schedule

San Mateo County Planning Department: 2 person - months (\$6000)

Start date: April, 1979

Completion date: Continuous through June, 1980

Product

Written progress reports, revised or updated County Surface Runoff Plan, participation in various meetings at local, regional and State level, administrative records.

Task 10

Coordinate Santa Clara County Surface Runoff Program

Background

A committee made up of local representatives of cities, County and appropriate special districts has been established to help carry out the actions of the County Surface Runoff Management Plan. This year's planning activities must be directed and monitored by the committee. The committee would serve as liaison between the various jurisdictions and policy committees of the County. The committee must be staffed adequately to carry out its functions.

Approach

The County Planning Department will provide the staff for this work item. A Surface Runoff Management Coordinator will be appointed to carry out the following work:

Responsibilities of Surface Runoff Management Coordinator

1. Serve as staff for Surface Runoff Coordinating Committee. This would include such activities as scheduling meetings and preparing agendas, meeting materials and minutes.
2. Gather and disseminate information regarding current 208 surface runoff management planning, implementation and monitoring activities.
3. Identify and monitor potential sources of funding for surface runoff management planning, implementation and monitoring. Disseminate funding information to local agencies.
4. Prepare or assist in preparation of grant applications. Follow-up on processing of grant applications.
5. Prepare recommendations for annual work program for surface runoff management in Santa Clara County, including recommendations regarding staffing, funds needed, funding sources and responsible agencies.
6. Prepare annual report regarding surface runoff management problems and accomplishments for submittal to the ABAG, Regional Water Quality Control Board and the Environmental Protection Agency.
7. Prepare recommendations for future water quality study areas.
8. Prepare necessary progress reports.
9. Prepare necessary financial reports and reimbursement requests, and maintain audit records.

10. Prepare recommendations regarding modifications of County Surface Runoff Plan, when necessary.
11. Conduct public information program regarding local surface runoff management problems and efforts.
12. Assist in obtaining local approval of management agreements related to surface runoff management efforts.
13. Perform such other task as may be determined by the Surface Runoff Coordinating Committee.

Responsible Agencies, Budget and Schedule

Santa Clara County Planning Department: 2 person-months (\$6,000)

Start date: April, 1979

Completion date: Continuous through June, 1980

Product

Meetings, progress reports, annual report, work program, informational packets, grant applications.

Task 11

Coordinate Solano County Surface Runoff Program

Background

The proposed planning effort will require various administrative activities including preparation of budget and work programs, coordination meetings with ABAG, grant management and reporting. The original Surface Runoff Management Plan will need to be updated and the Technical and Citizens' Advisory Committees reactivated or reconstituted.

Approach

The activities for this task will be essentially the same as those in task 6 (coordinate Alameda County Surface Runoff Program).

Detailed work programs for the various tasks will be prepared and a budget drawn up accordingly. Other necessary administrative and supervisory activities will be undertaken throughout the study period including required coordination meetings with ABAG and hiring of consultants.

The Technical Advisory Committee will be reactivated to assist with all aspects of the plan and the Citizen's Committee will be reconstituted to advise regarding planning activities as they affect the public.

Findings of other Surface Runoff Management Agencies will be reviewed by staff, as will all control measures in other county plans and on ABAG's original list. Items which merit consideration will be submitted to review by the Technical Advisory Committee and the Citizen's Advisory Committee. Recommendations for changes or additions to the Solano County Plan will be made as appropriate.

Responsible Agencies, Budget and Schedule:

Solano County Planning Department: 1.3 person-months (\$4,000)

Start date: April, 1979

Completion date: Continuous through June, 1980

Product

Work program, meetings, updated county plan, progress reports.

10. Prepare recommendations regarding modifications of County Surface Runoff Plan, when necessary.
11. Conduct public information program regarding local surface runoff management problems and efforts.
12. Assist in obtaining local approval of management agreements related to surface runoff management efforts.
13. Perform such other task as may be determined by the Surface Runoff Coordinating Committee.

Responsible Agencies, Budget and Schedule

Santa Clara County Planning Department: 2 person-months (\$6,000)

Start date: April, 1979

Completion date: Continuous through June, 1980

Product

Meetings, progress reports, annual report, work program, informational packets, grant applications.

Task 11

Coordinate Solano County Surface Runoff Program

Background

The proposed planning effort will require various administrative activities including preparation of budget and work programs, coordination meetings with ABAG, grant management and reporting. The original Surface Runoff Management Plan will need to be updated and the Technical and Citizens' Advisory Committees reactivated or reconstituted.

Approach

The activities for this task will be essentially the same as those in task 6 (coordinate Alameda County Surface Runoff Program).

Detailed work programs for the various tasks will be prepared and a budget drawn up accordingly. Other necessary administrative and supervisory activities will be undertaken throughout the study period including required coordination meetings with ABAG and hiring of consultants.

The Technical Advisory Committee will be reactivated to assist with all aspects of the plan and the Citizen's Committee will be reconstituted to advise regarding planning activities as they affect the public.

Findings of other Surface Runoff Management Agencies will be reviewed by staff, as will all control measures in other county plans and on ABAG's original list. Items which merit consideration will be submitted to review by the Technical Advisory Committee and the Citizen's Advisory Committee. Recommendations for changes or additions to the Solano County Plan will be made as appropriate.

Responsible Agencies, Budget and Schedule:

Solano County Planning Department: 1.3 person-months (\$4,000)

Start date: April, 1979

Completion date: Continuous through June, 1980

Product

Work program, meetings, updated county plan, progress reports.

Task 12

Evaluate and improve surface runoff-related ordinances regionwide

Background

The Surface Runoff Management Plan element of the Water Quality Management Plan recommended the development of various ordinances to control surface runoff. These include grading, erosion control, landscaping, littering, dumping and watercourse protection ordinances. Certain counties will be examining such ordinances in detail during the continuing planning process. ABAG staff needs to review and evaluate such ordinances and enforcement practices region-wide and recommend improvements.

Approach

This task will include the following activities:

- 1) Monitor and coordinate county work on ordinance evaluation

Schedule: Continuous through June, 1980

ABAG will review progress on county work and provide guidance. Criteria and guidelines developed for ordinance review, evaluation and drafting will be disseminated among counties. County findings will be integrated into ABAG's work.

- 2) Inventory ordinances regionwide

Schedule: April, 1979 - August, 1979

ABAG will inventory existing ordinances affecting surface runoff in all cities and counties in the region. A summary of the major features of each of these ordinances will be prepared.

- 3) Develop criteria for ordinance evaluation.

Schedule: June, 1979 - October, 1979

Staff will draft a set criteria for evaluating the ordinances and their enforcement. These criteria will be distributed to the counties performing ordinance evaluation.

- 4) Evaluate ordinances.

Schedule: October, 1979 - November, 1979

ABAG will perform the evaluation for non-participating counties. County evaluations performed in accordance with the criteria set in activity (3) will be incorporated into the regionwide evaluation.

5) Develop model ordinances.

Schedule: November, 1979 - March, 1980

Model ordinances will be drafted, including recommendations for enforcement. Costs for enforcement will be estimated. ABAG staff will work with cities and counties to promote the recommendations and seek commitments to implement.

ABAG will identify an ordinance or ordinances in one or more jurisdictions for a case study. Staff will visit selected sites or projects in different stages of completion to evaluate enforcement and compliance practices.

Responsible Agencies, Budget & Schedule

ABAG: 12.2 person-month (\$42,700)

Start date: April, 1979

Completion date: Draft Final Report - March, 1980
Task completion - June, 1980

Product

- o Regionwide Inventory of ordinances
- o Criteria for ordinance evaluation
- o Ordinance evaluation
- o Model ordinances and model enforcement procedures
- o Report of task activities

Task 13

Develop Model Watercourse Protection Ordinance and Review and Improve Surface Runoff-Related Ordinances and Enforcement Practices in Alameda County.

Background

The County's 33 major riparian corridors and watercourses are valuable but endangered resources. These corridors, including the watercourses (e.g., Temescal and Peralta in the Oakland area), have become a repository for all types of trash and litter. The watercourses (e.g., Arroyo Viejo in Oakland and San Lorenzo in Hayward) also suffer from abuse of their banks which leads to accelerated erosion rates. These problems adversely affect beneficial uses of virtually all streams within the County.

This task has two major objectives. The first objective is to prepare a countywide review of surface runoff-related ordinances and enforcement practices, and develop improvements. This activity will apply throughout Alameda County some of the detailed recommendations from the Cull Canyon work (Task 22) and other case studies and from the public works practice analysis (Task 20).

The second objective is to develop a model watercourse protection ordinance which can be applied throughout Alameda County and potentially throughout the entire region.

Approach

This task will include the following activities:

- 1) Inventory existing city and county ordinances, regulatory procedures and enforcement practices which provide some control over surface runoff pollution.

Schedule: April, 1979 - June, 1979

Emphasis will be placed on those ordinances, procedures and practices which relate to watercourse protection. This inventory will include:

- o grading ordinances
- o subdivision ordinances
- o zoning ordinances
- o hillside development ordinances
- o watercourse protection ordinances
- o flood plain regulations

- o project review guidelines
- o landscaping guidelines for hillsides
- o regulations regarding drainage changes

A literature review will be undertaken to identify similar existing ordinances. Various agencies potentially responsible for implementing the ordinance will be interviewed, e.g., County Environmental Health, Mosquito Abatement, Cities. Input gained from these various sources will then be checked with County Counsel for legal considerations. These legal considerations include such things as the need for each city to pass resolutions adopting the County ordinance because the streams cross many jurisdictional boundaries.

- 2) Evaluate ordinances, regulatory procedures and enforcement practices.

Schedule: July, 1979 - September, 1979

The ordinances, procedures and practices will be evaluated using the following criteria:

- o ability to achieve the water quality policies and objectives of local government (as stated in General Plans, ordinances, the County Surface Runoff Plan, etc.)
- o ability to achieve the water quality objectives and policies of federal, state and regional agencies and laws (including EPA, Clean Water Act, State Water Resources Control Board, Regional Water Quality Control Board and the Environmental Management Plan)
- o ability to solve known water quality problems
- o effectiveness in achieving objectives in (1) - (3) above

The evaluation will specifically identify those sections of ordinances or regulatory language which are not adequate to control the problems. It will also answer the question, "Do the ordinances and policies provide sufficient legal basis for adequate enforcement?" In addition, specific administrative procedures and enforcement practices needing improvement will be identified and assessed. As part of this task, for example, the following questions will be addressed:

- o Do agency staff and enforcement personnel have adequate training for implementation of ordinances?

- o Are local government budgets sufficient to provide for full implementation of ordinances?
- o Do developers and contractors know what design standards for erosion and sediment control measures are required to adequately mitigate impacts of development?
- o Are developers given sufficient impetus to apply necessary controls?
- o Is the public informed about the impacts and illegality of activities detrimental to water quality (for example sign posting along watercourses and at popular dumping sites)?

3) Develop model watercourse protection ordinance

Schedule: October, 1979 - March, 1980

The following items need to be considered in the development of the model watercourse protection ordinance:

- o watercourse geomorphology, flow region and ecology
- o basic water quantity and quality interactions with the natural system in and adjacent to the watercourse.
- o public policy objectives related to the watercourse and adjacent lands
- o site specific regulations:
 - buffer zones: floods plains, open space, wetlands
 - permitted uses within buffer zones
 - alterations in the wetercourse and within the buffer zone
 - jurisdictional considerations
 - federal and state-mandated stream protection
- o non-site specific regulations:
 - runoff control ordinances
 - erosion and sediment control ordinances

The draft ordinance will be circulated among the

participating agencies for review and comment. Using the 208 Technical Advisory Committee, presentations will be made to cities to explain and clarify the need, purpose, etc., of the ordinance. A final version will be circulated among ABAG and the other counties. Once questions regarding financing and enforcement are answered, the ordinance will be submitted to the Board of Supervisors for adoption. Each affected city will also be requested to adopt the Watercourse Protection Ordinance.

- 4) Develop improvements for other ordinances, regulatory procedures and enforcement practices

Schedule: December, 1979 - March, 1980

These improvements will consist of corrective language for ordinances and administrative guidelines which address the deficiencies previously identified. These improvements will be developed in coordination with the affected agencies (county, city and special district). The county will also seek to have the improvements implemented within each affected jurisdiction (see Task 41).

Responsible Agencies, Budget and Schedule

Alameda County Flood Control District: 3.2 person months (\$9,500)

Starting Date: April, 1979

Completion Date: Draft final report - March, 1980
Task completion - June, 1980

Product

- o Model watercourse protection ordinance
- o Proposed ordinance revisions
- o Proposed revisions to administrative procedures, guidelines and enforcement practices.

Task 14

Improve EIR Process to Mitigate the Effects of Construction Erosion in Contra Costa County

Background

Contra Costa County has guidelines for the preparation of an adequate Environmental Impact Report (EIR) and a checklist the Initial Study of Environmental Significance) from which it is determined whether an EIR or a Negative Declaration shall be prepared.

The guidelines and the checklist fail to bring out two important points regarding construction erosion:

- o The connection between erosion, sedimentation and water quality.
- o The fact that construction erosion impacts are relatively short-term compared to other impacts normally considered in the EIR process. (The majority of erosion and sedimentation may take place during the first rainy season following construction.)

These points will be considered in the EIR process through revision of the Initial Study checklist and EIR guidelines, and mitigation will be ensured through revision of BMP's and their incorporation into the process. Primary effort will be devoted to County procedures. City procedures will be improved as much as time and budget permit.

Approach

This task will include the following activities:

- 1) Revise the Initial Study Checklist and EIR guidelines so that the relationship between construction erosion and water quality will be included and made clear.

Schedule: April, 1979 - May, 1979

- 2) Revise the Initial Study checklist and EIR guidelines so that the relatively short-term nature of construction erosion is pointed out and so that high priority is given to immediate, effective mitigation.

Schedule: April, 1979 - May, 1979

- 3) Revise the Conservation Control Measures and their Component Conservation Practices found in the Bay Area Council of RCD's Handbook of BMP's to increase their effectiveness in Contra Costa County, and prepare a map of county erosion control sub-areas indicating where particular methods will be applied.

Schedule: June, 1979 - September, 1979

Using the best available information on vegetation, soil, terrain, geology, weather and other factors, the BMP's will be "tailored" to the particular conditions found within the County. Conservation practices will be rated according to their relative effectiveness, ease of application and cost to promote uniformity of erosion control procedures in the County. The accompanying map of erosion control method sub-areas will indicate control procedures to be used in particular areas of the county.

- 4) Supplement the revised BMP's with other published procedures not covered in the Handbook and with descriptions of procedures being used in the County and not covered in the Handbook.

Schedule: October, 1979 - December, 1979

- 5) Ensure the use of the revised BMP's and map in the EIR process as mitigation measures and, where appropriate, as conditions of project approval.

Schedule: January, 1980 - March, 1980

Responsible Agencies, Budget, and Schedule

Contra Costa County Planning Department: 2.7 person-months (\$8,000)

Start date: April, 1979

Completion date: Draft final report - March, 1980
Task completion - June, 1980

Product

- o Proposed revisions to Initial Study Checklist and EIR guidelines.
- o Handbook of revised BMP's specific to Contra Costa County with accompanying map.

Task 15

Incorporate BMP's into the San Mateo County Development Review Process.

Background

No objective criteria exist for the assessment of erosion impacts of proposed development within city and county development regulations and environmental review guidelines. Additional research on erosion and sedimentation is a prerequisite for the development of strictly objective criteria. Until such criteria are developed, however, the incorporation of Best Management Practices into city and county development review procedures would be an interim method of improving existing erosion control practices.

Approach

This task will include the following activities:

- 1) Evaluate the thirteen Conservation Control Measures described in the Handbook of BMP's according to their applicability to erosion situations found in San Mateo County and improve the measures where necessary.

Schedule: April, 1979 - July, 1979

The Conservation Control Measures are designed to cover a wide variety of situations and conditions found throughout the entire Bay Area. Using the best available information on vegetation, soil, terrain, geology, weather, and other factors within San Mateo County, divide the county into sub-areas and list practices appropriate for each. A map of these sub-areas will be produced.

- 2) Evaluate the component Conservation Practices listed in each Conservation Control Measure for applicability and effectiveness.

Schedule: April, 1979 - July, 1979

Each Conservation Control Measure contains a list of component Conservation Practices which can be used to implement the control measure. These practices should be evaluated for this applicability and "tailored" to improve their effectiveness. These practices should be rated according to their relative effectiveness, ease of application, and cost to promote uniformity of erosion control procedures within the county.

- 3) Supplement the procedures found in the Handbook of BMP's with other published procedures or with procedures currently used in the county and not listed in the Handbook.

Schedule: August, 1979 - September, 1979

These additional procedures should be organized into and distributed as a County-specific supplement to the Handbook of BMP's.

- 4) Compare erosion control measures in existing city and County development review and environmental review procedures with the revised BMP's identified during the execution of activities 1)- 3).

Schedule: October, 1979 - December, 1979

This comparison should be made on the basis of relative effectiveness, ease of application, and cost. The revised BMP's will also be compared with erosion control provisions of city and County ordinances (zoning, subdivision, grading, watercourse protection, hillside development, etc.) encountered during the course of the development and environmental review processes.

- 5) Prepare development review and environmental review guideline revisions and ordinance revisions incorporating applicable BMP's identified during the execution of activities (1)-(3).

Schedule: January, 1980 - March, 1980

These revisions will refer to the revised BMP's and the map of county erosion control practices sub-areas and will indicate procedures for selection of appropriate control measures.

Responsible Agencies, Budget, and Schedule

San Mateo County Planning Department: 4 person-months (\$12,000)

Start date: April 1979
Completion date: Draft final report - March 1980
Task completion - June 1980

Product

Written report presenting:

- o Handbook of BMP's revised for applicability to San Mateo County and map of County erosion control practice sub-areas
- o Revised development review guidelines

- o Revised environmental review guidelines
- o Proposed ordinance revisions

Task 16

Review and Improve Erosion Control Ordinances in Santa Clara County.

Background

Most jurisdictions in Santa Clara County have ordinances or regulations that address erosion control. These include grading, subdivision and hillside development ordinances and project review guidelines (see "Approach"). Despite these regulations, evidence of erosion and sedimentation still exists, both within and outside city limits. A countywide examination of existing ordinances and enforcement procedures is needed to determine the extent to which these ordinances are achieving the stated erosion control policies of the various local governments throughout the county.

The Calabazas Creek Watershed study (see Task 27) will examine the above issues in detail within the Calabazas study area. This task is designed to survey these problems on a countywide basis and apply the detailed recommendations of the Calabazas study to other areas in the County.

Approach

This task will include the following activities:

- 1) Inventory existing city and county ordinances, regulatory procedures and enforcement practices which provide some control over erosion.

Schedule: April, 1979 - June, 1979

This inventory will include:

- o grading ordinances
- o subdivision ordinances
- o zoning ordinances
- o hillside development ordinances
- o watercourse protection ordinances
- o flood plain regulations
- o project review guidelines
- o landscaping guidelines for hillsides
- o regulations regarding drainage changes

- 2) Evaluate ordinances, regulatory procedures and enforcement practices.

Schedule: July, 1979 - October, 1979

The ordinances, procedures and practices will be evaluated using the following criteria:

- o ability to achieve the water quality policies and objectives of local government (as stated in general plans, ordinances, the County Surface Runoff Plan, etc.)
- o ability to achieve the water quality objectives and policies of federal, state and regional agencies and laws (including EPA, Clean Water Act, State Water Resources Control Board, Regional Water Quality Control Board and the Environmental Management Plan)
- o ability to solve known erosion and siltation problems
- o effectiveness in achieving objectives in (1)-(3) above

The evaluation will specifically identify those sections of ordinances or regulatory language which are not adequate to control the problems. It will also answer the question, "Do the ordinances and policies provide sufficient legal basis for adequate enforcement?" In addition, specific administrative procedures and enforcement practices needing improvement will be identified and assessed. As part of this task, for example, the following questions will be addressed:

- o Are there enough site inspections to ensure compliance with ordinances?
- o Do inspector have adequate training in erosion control methods?
- o Do developers know what design standards for erosion and sediment control measures are required to adequately mitigate impacts of development?
- o Are developers given sufficient impetus to apply necessary controls?

3) Develop improvements for ordinances, regulatory procedures and enforcement practices.

Schedule: November, 1979 - March, 1980

These improvements will consist of corrective language for ordinances, procedure manuals and administrative guidelines and model ordinances which address the deficiencies

previously identified. These improvements will be developed in coordination with the affected agencies (County, city and special districts). The County will also seek to have the improvements implemented within each affected jurisdiction (see Task 41).

Responsible Agencies, Budget and Schedule

Santa Clara County Planning Department: 3 person-months (\$9,000)

Starting Date: April 1979

Completion Date: Draft final report - March, 1980
Task completion - June, 1980

Product

- o Model ordinances
- o Proposed ordinance revisions
- o Proposed revisions to administrative procedures, guidelines and enforcement practices

Task 17

Evaluate and Improve Surface Runoff Related City and County Ordinances in Solano County

Background

Local ordinances were discussed with relation to specific pollution problems during plan preparation and a list of County ordinances affecting surface runoff was made as part of the response to the comments of the Regional Water Quality Control Board on the Solano County 208 Plan. However, the need exists to evaluate the effectiveness of existing ordinances and regulatory procedures and make any needed changes as a logical first step in controlling surface runoff pollution via the regulatory process.

It is felt that this inventory and evaluation can be most effectively accomplished at the local level due to variations among localities in land use, governmental organization and level of service, and political climate. Recommendations for changes in existing ordinances or for new ordinances are much more likely to be accepted at the local level if they are produced at the local level.

Approach

This task includes the following activities:

- 1) Inventory existing city and County ordinances, regulatory procedures and enforcement practices which provide some control over surface runoff.

Schedule: April, 1979 - June 1979

This inventory will include:

- o grading ordinance
- o subdivision ordinances
- o zoning ordinances
- o hillside development ordinances
- o watercourse protection ordinances
- o flood plain regulations
- o project review guidelines
- o landscaping guidelines for hillsides
- o regulations regarding drainage changes

- o litter controls
- o dumping controls
- o pet and domestic animal controls

2) Evaluate ordinances, regulatory procedures and enforcement practices.

Schedule: July, 1979 - October, 1979

The ordinances, procedures and practices will be evaluated using the following criteria:

- o ability to achieve the water quality policies and objectives of local government (as stated in General Plans, ordinances the County Surface Runoff Plan, etc.)
- o ability to achieve the water quality objectives and policies of federal, state and regional agencies and laws (including EPA, Clean Water Act, State Water Resources Control Board, Regional Water Quality Control Board and the Environmental Management Plan)
- o ability to solve known water quality problems
- o effectiveness in achieving objectives in (1)-(3) above

This evaluation will specifically identify those sections of ordinances or regulatory language which are not adequate to control the problems. It will also answer the question, "Do the ordinances and policies provide sufficient legal basis for adequate enforcement?" In addition, specific administrative procedures and enforcement practices needing improvement will be identified and assessed. As part of this task, for example, the following questions will be addressed:

- o Are there enough site inspections to ensure compliance with ordinances?
- o Do inspectors have adequate training in erosion control methods?
- o Do developers know what design standards for erosion and sediment control measures are required to adequately mitigate impacts of development?
- o Are developers given sufficient impetus to apply necessary controls?

3) Develop improvements for regulatory procedures and enforcement practices.

Schedule: November, 1979 - March, 1980

These improvements will consist of standards corrective language for ordinances, procedure manuals and administrative guidelines, and model ordinances which address the deficiencies previously identified. These improvements will be developed in coordination with the affected agencies (County, city and special districts). The County will also seek to have the improvements implemented within each affected jurisdiction.

Responsible Agencies, Budget and Schedule

Solano County Planning Department: 4.7 person-months (\$14,000)

Start date: April, 1979

Completion date: Draft final report - March, 1980
Task completion - June, 1980

Product

- o Model ordinances
- o Proposed ordinance revisions
- o Proposed revisions to administrative procedures, guidelines and enforcement practices.

Task 18

Evaluate and Improve Surface Runoff Control Measures Regionwide

Background

Local governments presently are engaged in a wide variety of practices which affect surface runoff. A considerable amount of money is being spent on these practices and many are proposed to be expanded during implementation of the surface runoff program. Until now most of these practices have not been oriented towards improving water quality. In addition, it is not known how extensive these practices are in many jurisdictions and what steps could be taken to improve their effectiveness in improving water quality of receiving waters and the Bay.

Approach

This task will include the following activities:

- 1) Monitor and coordinate county work on control measures.

Schedule: Continuous through June, 1980

ABAG will review progress on county work and provide guidance. Criteria developed for control measure assessment, evaluation and implementation procedures will be disseminated among counties. County findings will be integrated into ABAG's regional evaluation of control measure impacts.

- 2) Inventory and identify current control measure practices regionwide.

Schedule: April, 1979 - July, 1979

ABAG will organize a regionwide program for evaluating existing practices affecting surface runoff and will coordinate the efforts of the participating counties. The current level of effort in all cities and counties will first be identified. ABAG staff will develop criteria for inventorying the practices (e.g., type of equipment used, number of curb miles swept, frequency of sweeping and litter pick-up, etc.). These criteria will be distributed for use by the counties performing control practice evaluations within their jurisdictions.

This control measure survey will expand on the results of the Woodward-Clyde questionnaire. Responses from the county surveys conducted during the initial planning phase will be compiled and analyzed. Incomplete and unreturned questionnaires will be followed-up and new questions will be added.

3) Assessment of control measure effectiveness.

Schedule: August, 1979 - October, 1979

ABAG will develop generalized cost-effectiveness data on control measures. This data will be distributed to participating counties for local review. ABAG will perform the control measure assessment for the non-participating counties.

4) Develop cost-effective control measure alternatives regionwide.

Schedule: November, 1979 - December, 1979.

5) Recommend control programs and develop guidelines for implementation.

Schedule: December, 1979 - March, 1980

Staff will identify modifications which could be made to increase the effectiveness of current practices toward improving water quality. An assessment will be made of the level of effort required to make the recommended changes (e.g., cost, labor and equipment requirements, etc.). ABAG staff will work with local governments to encourage implementation of the recommendations.

Responsible Agencies, Budget and Schedule

ABAG: 12 person-months (\$42,000)

Start date: April 1979

Completion date: Draft final report - March, 1980

Task completion - June, 1980

Product

- o Criteria and guidelines for control measure assessment, evaluation and implementation.
- o Regionwide description of existing control measure practices.
- o Cost-effective control measure alternatives.
- o Programs for regionwide implementation of cost-effective control measures.
- o Final report on task activities.

Task 19

Coordinate Urban Lakes Programs

Background

The Surface Runoff Management Plans and past planning efforts by the RWQCB and other agencies have identified surface runoff-related pollution problems in several urban lakes in the region. These lakes serve as major recreation sites for large numbers of urban dwellers because of their proximity to heavily populated areas. Unfortunately many of the beneficial uses of these lakes, as identified in the Basin Plan for the San Francisco Bay Region, have been impaired because of this pollution.

Three urban lakes have been selected for development of clean-up programs. In the case of Lake Temescal, a proposal was developed by the East Bay Regional Park District to be funded under the Federal Clean Lakes Program. Part of the funding for this \$102,000 project will be provided by the U.S. Geological Survey. This USGS has signed an agreement with the District to establish monitoring stations on Caldecott and Temescal Creeks. The program is intended to reduce silting and pollution of the lake by imposing stricter building regulations in the Montclair district of Oakland, improving storm drainage on public and private property, improving street sweeping, eliminating cross-connections between storm and sanitary sewers, increasing landscaping on private lots and constructing holding ponds on the creeks.

In the case of Lake Merritt and the San Mateo Lagoon, the clean-up plans will be developed by Alameda and San Mateo county surface runoff staff respectively.

Since the pollution of Lake Temescal is multijurisdictional, involving two cities (Oakland and Piedmont) and a special district, and since the recommended control programs for all three lakes will be closely related to the overall surface runoff program, ABAG should monitor the development of these plans and see that they are integrated with the rest of the surface runoff program.

Approach

ABAG staff will monitor progress on the development of clean-up programs for the three lakes, maintaining close contact with the East Bay Regional Park District, the Cities of Oakland, Piedmont and San Mateo, the USGS and Alameda and San Mateo Counties. Staff will keep the above parties informed about all relevant developments coming out of the Surface Runoff Program (e.g., model ordinances, effective control measure and enforcement procedures). In addition, staff will work with the affected jurisdictions to seek their commitment to implement the recommended control measures. Significant findings and results from this program will be made available to each of the nine counties and to cities with similar problems.

Responsible Agencies, Budget & Schedule

ABAG: 3 person-months (\$10,500)

Start date: April, 1979

Completion date: Continuous through June, 1980

Product

Integrated urban lakes clean-up/Surface Runoff Program.

Task 20

Evaluate and Improve Public Works Practices in Alameda County

Background

Runoff from the urban areas of Alameda County is a major nonpoint pollution source for the inland watercourses and San Francisco Bay. The county and the cities and engaged in various practices for the control of urban runoff. During the development of the Surface Runoff Management Plan, it was learned that quantitative measure of performance were lacking for the current control measure practices. Therefore, this study proposes to evaluate the effectiveness of the current measures quantitatively and suggest improvement for the cost-effective control of urban runoff pollution within the county.

Approach

This task will include the following activities:

- 1) Describe control measure practices

Schedule: April, 1979 - May, 1979

This description should include all jurisdictions within the county or a representative sample (e.g., county, typical large city, typical small city). The following minimum list of practices will be included (1):

- o street sweeping
- o street flushings
- o catch basin cleaning
- o storm drainage system maintenance
- o litter control

These practices will be described according to the characteristics shown below (2):

- o frequency of sweeping or cleaning by area (e.g., commercial, residential, industrial, rural)

- (1) To emphasize control measures of particular local concern and to avoid duplication of effort between counties, substitutions may be made in consultation with ABAG.
- (2) Other characteristics may be substituted in consultation with ABAG.

- o type of equipment
- o seasonal variations in practice
- o staff training and operating procedure, including follow-up inspection
- o annual expenditure (for each practice in each jurisdiction)

2) Evaluate current control measure practices.

Schedule: June, 1979 - July, 1979

The purpose of this activity is to assess the cost-effectiveness of the practices. The following criteria will be used in this evaluation:

- o Cost per unit pollutant removed (at various operating levels)
- o Percent of total pollutant load or portion of problem controlled by the practice.

The County will either develop its own cost curves or will review the cost curves provided by ABAG for consistency with local experience.

3) Develop cost-effective improvements for existing practices.

Schedule: August, 1979 - October, 1979

These improvements should involve little or no increase above current costs and should be developed in conjunction with the affected agencies.

This activity will show, using techniques similar to the evaluation of current practices (see activity 2) how the proposed improvements are cost-effective.

4) Select improvements for implementation.

Schedule: October, 1979 - November, 1979

The improvements will be selected from the alternatives analyzed in activity (3). This activity will also explain how and why the selections were made. It may include all improvements proposed under activity (3).

5) Develop detailed procedure and schedule for implementing selected improvements.

Schedule: November, 1979 - March, 1980

This activity will include a sequence of actions for each affected agency and new or revised language (for policies, resolutions, administrative procedures, etc.) for adoption by the appropriate governmental bodies.

Note: ABAG will coordinate this task with tasks 20-28, and in particular, tasks 20 and 26, to minimize duplication of efforts and to ensure that at least one detailed improvement procedure for each of the major control practices identified in the region is developed.

In addition, county staff will seek commitments to implement the improvements under Task 41.

Responsible Agencies, Budget and Schedule

Alameda County Flood Control District: 5 person-months (\$15,000)

Starting Date: April, 1979

Completion Date: Draft final report - March 1980
Task completion - June 1980

Product

- o Description and data on the current control measures
- o Evaluation of the current control measures
- o Cost-effective control measure improvements
- o Program (including schedule) for implementation of control measure improvements.

Task 21

Develop Pollution Control Program for Lake Merritt

Background

Lake Merritt probably represents the most well-known water quality problem in the region. Many water quality problems at Lake Merritt have been identified by various agencies. Some of these problems are:

- o bacterial contamination
- o periodic nuisance algal growths
- o build-up of polluted sediments
- o periodic fish kills
- o floating debris

It is known that urban runoff is an important source contributing to these problems. However, the relative contribution from other sources is not known. The extent of the problem caused by each source must be determined before cost-effective control of the Lake's problems can be achieved.

Approach

The Alameda County Flood Control and Water Conservation District (District) will determine the relative contribution of each major source and recommend the most cost-effective control program for the Lake. The District will be assisted by the City of Oakland and the East Bay Municipal Utility District, Special District 1 (EBMUD). Oakland will supply a recommended list of Lake maintenance practices to control the algal problem. EBMUD and District will supply dry and wet weather monitoring data.

This task will include the following activities:

- 1) Establish the relative contribution of pollutants from sanitary sewage and urban runoff.

Schedule: April, 1979 - July, 1979

This activity will build upon prior work. An extensive bibliography of research done on the Lake has been compiled. Selected references will be obtained and evaluated. EBMUD has unpublished but recently collected monitoring data which also will be scrutinized. Modeling developed on one of the tributaries to Lake Merritt (Glen Echo) during the development of the 208 Surface Runoff Management Plan will be used. Limited water quality data may have to be collected to plug data gaps identified by the rigorous review of existing data.

These potential gaps may involve gathering data on three conditions. Manual grab samples might have to be taken at storm outlets during a) dry weather, b) wet weather before sanitary overflows occur, and 3) wet weather when sanitary sewage overflows occur. A rigorous review of all existing data, however, is necessary to determine the necessity for any new data collection.

Based on the available data, relative contribution of pollutants from various sources will be estimated.

2) Develop control measures.

Schedule: July, 1979 - October, 1979

Under this activity, measures to control the symptoms of the problem as well as the sources of the problem will be developed. For example, if it is found that sanitary sewage overflows account for an unacceptably significant contribution of bacteria and nutrients, then structural controls such as rerouting of the sanitary sewers may be proposed. Conversely, if urban runoff contributes significantly more nutrients and bacteria than sewage overflows, on-site best management practices may be the best solution. Maintenance practices which have been proposed to restore the lake and treat the symptoms of the problems are yet a third major control program alternative. Expanding modeling for the total Lake Merritt watershed may be necessary to test the effects of the recommended BMP's.

3) Analyze and recommend control programs.

Schedule: November, 1979 - January, 1980

Cost-effectiveness of alternative control measures will be analyzed. Such an analysis will take into account the social and financial realities of the agencies involved in the implementation of the control measures. Control programs will be recommended based on the results of the analysis.

4) Obtain commitments to implement the recommended control programs.

Schedule: January, 1980 - March, 1980

The District will seek commitments to implement the recommended control programs from the affected agencies.

Responsible Agencies, Budget and Schedule

Alameda County Flood Control District: 5 person-months (\$45,000)

Start date: April, 1979

Completion date: Draft final report - March, 1980
Task completion - June, 1980

Product

Cost-effective pollution control program for Lake Merritt

Task 22

Develop erosion control plan for Cull Canyon

Background

Cull Canyon is a rural watershed which suffers a high erosion rate. The local RCD and SCS are interested in using this area as a pilot area to develop an implementation program of rural best management practices.

Cull Canyon Reservoir is a regional aquatic park facility located in Cull Canyon watershed which is a highly populated and developing mid-County area. Fishing is a high intensity beneficial use of the reservoir. The reservoir and its beneficial use is threatened by the high sedimentation rate in this watershed. Within ten years of the construction of the reservoir it had to be closed for dredging. The cost for the dredging was over \$900,000 and the surrounding regional aquatic park had to be closed nearly two years.

This park closure and proposed residential development which accelerated sedimentation of the reservoir caused a good deal of public concern. This visible public concern prompted the County Planning Commission in 1976 to begin an investigation of the erosion and sedimentation problems.

Until recently the many interested agencies representing the concerned public have only sporadically investigated the problem because of a lack of staff availability and funding commitments. The County Surface Runoff Management Plan targeted the watershed for a rural BMP program and has scheduled implementation for 1979. A preliminary work plan has been completed by the Alameda County Flood Control and Water Conservation District and negotiations have begun with the concerned agencies for their active participation in the project.

This watershed analysis approach will be applicable to similar rural watersheds with reservoirs with fishing and swimming as beneficial uses. SCS, one of the participants in the project has supplied material from their studies in the Central Valley and near the Oregon border which indicates the applicability of the watershed analysis methodology for the Cull project to similar type watersheds. Don Castro reservoir here in the County is the prime example of where this type of analysis can be applied best.

Besides SCS, other participating agencies include County Planning Department, the local RCD, and USGS. The District in cooperation with USGS has already established two \$30,000 sediment monitoring stations on the reservoir.

Approach

This task will include the following activities:

- 1) Collect and review relevant information.

Schedule: April, 1979 - June 1979

Relevant information such as SCS maps and USGS sediment yield data on Cull Watershed will be received in order to identify sources of erosion and potential mitigation measures. Field inspections will be made to document field conditions. Property owners, particularly agricultural operators, will be contacted regarding control of erosion from their land. Source identification will be verified by analysis of soils, geology, agricultural and development practices, aerial photo interpretation and field inspection and measurements. Baseline sediment yield data will be developed in order to monitor effects of BMP on Cull Reservoir.

- 2) Develop control programs.

Schedule: July 1979 - November 1979

Potential mitigation measures for the identified erosion sources will be developed. Control programs which include on-site rural best management practices and maintenance of the reservoir and downstream drainage facilities will be analyzed. The most cost effective control program will be recommended.

- 3) Obtain commitments to implement the recommended control program.

Schedule: December, 1979 - January, 1980

Commitments from property owners to implement on-site management practices will be sought by the Alameda County Flood Control District through the local RCD. These commitments will take the form of both short-term projects to stabilize localized problem areas and long-term agreements (LTA's) with the RCD.

- 4) Develop a proposal for financial assistance.

Schedule: February, 1980 - March, 1980

A proposal for financial assistance for implementing selected rural BMP's will be developed.

Responsible Agencies

Budget & Schedule

Alameda County Flood Control District: 10 person-months \$30,000

Start date: April, 1979

Completion date: Draft final report - March, 1980

Task completion - June, 1980

Product

- o Current data on erosion and sediment in Cull Canyon Watershed.
- o Erosion and Sediment Control Programs
- o Implementation Commitments
- o A proposal for financial assistance

Task 23

Develop Water Quality Protection Plan for Nicasio Valley

Background

At the present time, a major planning effort in Marin County is to examine water quality as an important factor in developing land use strategies. As part of the continuing process of its Surface Runoff Management Plan, Marin County has indicated a commitment to reviewing water quality issues within the context of making land use decisions. The county is now in the process of preparing a community plan for Nicasio Valley which will include water quality as an important element in the formulation of land use policies. The Nicasio Valley Community Plan, which is being financially supported by the County, the Marin Municipal Water District and the local homeowners group, is a broad policy plan affecting the Nicasio watershed. This plan will be recommending, in part, land use measures that will lead to the improvement and maintenance of high water quality in Lake Nicasio - a municipal water supply watershed. These recommended land use measures will be general in nature and will not be in sufficient detail to be directly implemented.

Past studies have indicated that nitrogen and phosphate concentrations in the lake have risen to unacceptable levels and that future development controls are key to water quality improvement. It is expected that this proposed surface runoff task will use these studies and the Nicasio Community Plan as a basis for developing and implementing specific regulatory techniques in addressing water quality problems.

Approach

This task will refine and seek to implement the alternative land use regulatory techniques proposed in the Nicasio Area Community Plan to protect water quality. It will include the following activities:

- 1) Develop performance standards.

Schedule: April, 1979 - September, 1979

Performance standards for residential development, grazing, agriculture and other activities expected in the watershed (and possibly for present activities) will be developed based on:

- o existing knowledge about the water quality problems in the watershed, and
- o the best available information on control measures (including BMP handbook developed by Bay Area Council of RCD's).

Additional problem identification and analysis will be performed as needed to justify the proposed performance standards. This may include the following:

- o Identify and evaluate status of water quality in Nicasio Valley.
- o Identify potential and actual sources of pollution.
- o Assess extent to which development and other land use alternatives may change long term water quality levels.

2) Develop alternative approaches using transfer of development rights (TDR) to protect sensitive lands.

Schedule: October, 1979 - January, 1980

The analysis of TDR will begin by identifying those areas in the watershed that are most suitable for development. Criteria for development suitability may include the following environmental factors:

slope
ground stability
water supply
preservation of agriculture
water quality

Land identified as suitable or not suitable for development will be compared to maps of land ownership. Alternative approaches using TDR to protect the sensitive lands and allow development on the suitable lands will then be proposed.

3) Obtain commitments to implement the recommended performance standards and the TDR approaches.

Schedule: February, 1980 - March, 1980

The County and the Marin Municipal Water District will seek to implement the recommendations for the Nicasio area.

In addition, San Geronimo Valley and Tomales Bay watershed are similar rural out areas facing future development pressure. Therefore, the performance standards and TDR approaches proposed in Nicasio could be considered by the affected agencies in both areas as well.

Responsible Agencies, Budget and Schedule:

Marin County Planning Department: 13.3 person-months (\$40,000)

Start date: April, 1979

Completion date: Draft final report - March, 1980
Task completion - June, 1980

Product

- o Performance standards to protect water quality in Nicasio Valley.
- o Description of how these performance standards could be applied to other rural areas in county.
- o Land capability analysis of Nicasio Valley which identifies the development opportunity.
- o TDR program to protect water quality in Nicasio Valley, including legal and financial mechanisms for implementation.

Task 24

Develop Erosion Control Plan for Pescadero Creek Watershed

Background

There is growing concern over the erosion and associated water quality problems in coastal watersheds of San Mateo County. Annual sediment yields in many areas have increased from five tons per acre to over 300 tons per acre as a result of increased timber harvesting and rural development. The bacteria and high nitrate levels found in the local groundwaters created concern over the land use activities and associated surface--subsurface water quality interactions. The County Planning Division and the Resource Conservation District identified the Pescadero Creek watershed as a priority problem area. Pescadero Creek exhibits nonpoint source pollution from silvicultural, agricultural, and rural development activities.

The zoning established by the San Mateo County Resource Management District which tries to limit development to 5-40 acre lots has been ineffective in reducing erosion problems due to the general nature of the criteria used, lack of quantified data base, and pressure from the development interests. The downstream land owners complain about the silt and logs clogging the streams and eroding the stream banks and roads. Flower and artichoke growers report damage done to their irrigation pumps and pipes. Much of the 25,000 acres of timberland (redwood and douglas fir) in the 37,000 acre watershed of Pescadero Creek is subject to environmentally unsound silvicultural activities. Pescadero Creek marsh is subject to increased sediment loads.

Development and implementation of best management practices are needed to prevent further erosion problems. Since Pescadero Creek watershed typifies the coastal areas of the San Mateo County, data and actions developed here would be transferable elsewhere within the County coastal area.

Approach

This task will include the following activities:

- 1) Develop best management practices for specific areas of the watershed.

Schedule: April, 1979 - June, 1979

Practices such as seeding critical areas with improved grasses, rotational grazing and desilting basins will be considered.

- 2) Develop conservation plans for 10-15 typical landholdings.

Schedule: July, 1979 - October, 1979

These include farms, ranches, timber harvesting areas, and subdivisions

- 3) Develop programs for implementation and monitoring in cooperation with the landholders.

Schedule: November, 1979 - December, 1979

- 4) Develop technical assistance schedules and fundings sources for the landholdings.

Schedule: January, 1980 - March, 1980

Funding sources such as USDA cost sharing programs will be sought.

- 5) Establish a sediment monitoring program on Pescadero Creek.

Schedule: January, 1980 - March, 1980

Responsible Agencies, Budget & Schedule

San Mateo County Planning Department: 7.5 person months (\$22,500)

Starting date: April, 1979

Completion date: Draft final report - March, 1980

Task completion - June, 1980

Product

- o Best management practices for site-specific areas across the watershed
- o Conservation plans for 10-15 landholdings
- o Implementation and monitoring plans
- o Schedule of assistance and funding sources
- o Sediment monitoring program for Pescadero Creek

Task 25

Develop Pollution Control Plan for San Mateo Lagoon

Background

San Mateo Lagoon is located along the west side of San Francisco Bay entirely within the city limits of the City of San Mateo. The San Mateo County Surface Runoff Management Plan identifies the Lagoon as a water quality problem area. Algae, stagnant water, odor, bacteria, and fish problems were noted in a local survey. This area is also adjacent to the Foster City Lagoon system, where similar problems exist.

An urbanized upland area covering the southern two-thirds of San Mateo drains into three creeks which empty into the Lagoon. Historically an estuary, tidal action in the Lagoon is now controlled by tide gates near its mouth. During late spring and summer, the gates are used to keep water at a high level so the Lagoon is primarily salt water. In the fall, the Lagoon is pumped out, with the tide gates used to keep the water level low. Then, during the rainy season, the lagoon serves as a flood basin, providing storage for runoff water which is pumped into the Bay. During this period, the Lagoon is primarily fresh water with its level fluctuating according to runoff volumes.

The primary known water quality problem in the Lagoon is the excessive growth of aquatic plants, particularly algae. The severity of the aquatic plant problem varies from year to year, depending upon climatic conditions and the success of chemical treatment. In the fall, the plants can become a problem for neighboring residents of the Lagoon, since natural decay and pumping out of the Lagoon leaves dying plants exposed to the open air, creating odors and other problems associated with decaying vegetation. While the Lagoon is generally safe for fishing, swimming and boating, other water quality problems may exist, as there have been minor fish kills in the past.

According to one report, the quality of the Lagoon water is influenced to a large degree by runoff which drains into inflowing creeks and causes reduced salinity and increased turbidity.

Runoff from Marine World/Africa USA is also suspected to be a contributing factor to the water quality problem, as animal wastes may reach the lagoon from a slough connecting the Lagoon's southern terminus to Belmont Slough. These combined sources contain pollutants and nutrients which are the probable cause of fish kills and excess algal growth in the lagoon.

Nearby residents have complained to the City of San Mateo and to the Regional Water Quality Control Board about odors from the Lagoon. The California Department of Fish and Game has also contacted the Regional Board about fish kills in the Lagoon.

Approach

This task will include the following activities:

- 1) Identify type and source of pollutants entering the Lagoon, and identify the cause-effect relationships of the water quality problems.

Schedule: April, 1979 - June, 1979

Upstream sources of surface runoff will be investigated as well as the connection with Belmont Slough as a possible conduit for contaminant from Marine World/Africa USA.

- 2) Monitor selected water quality parameters at selected points.

Schedule: April, 1979 - March, 1980

- 3) Evaluate the effectiveness of the past and current Lagoon management practices on the water quality of the Lagoon.

Schedule: July, 1979 - October, 1979

These practices include control of the water levels, operation of the tide gates and pumps, and chemical treatment.

- 4) Develop alternative control measures.

Schedule: November, 1979 - January, 1980

The emphasis will be on cost-effective non-structural upstream watershed treatment methods and revised operational procedures.

- 5) Develop a pollution control program including a set of cost-effective control measures.

Schedule: February, 1980 - March, 1980

The program will indicate agencies responsible for implementing the selected control measures. The County will seek implementation commitments from these agencies.

February, 1980 - March, 1980

Responsible Agencies, Budget & Schedule

San Mateo County Planning Department: 10 person-months (\$30,000)

Starting date: April, 1979

Completion date: Draft final report - March, 1980

Task completion - June, 1980

Product

- o Identification of pollutants entering the San Mateo Lagoon
- o Monitoring of selected water quality parameters at selected

points

- o Evaluation of the current management practices
- o Development of alternative control measures
- o Pollution control plan for the San Mateo Lagoon

Task 26

Evaluate and Improve Rural Surface Runoff Control Practices in Santa Clara County

Background

This task is designed to complement Tasks 16, 18, 20, and 28. It will focus on controlling runoff problems in rural areas. Land use activities in these areas are frequently beyond the control of conventional tools such as subdivision and grading ordinances. Yet, rural land use activities may be contributing significant amounts of sediment and other pollutants to the Bay. Examples of these rural land uses and activity are horse farms, vineyards, fertilization, irrigation, cattle ranching and grading for farm roads, ponds, barns, etc. These activities have until now largely been controlled only by voluntary conservation programs.

There has been no comprehensive inventory of soil erosion problem areas outside city limits. There is evidence of siltation, sedimentation, and roadway erosion. Normal maintenance activities of the County and the Santa Clara Valley Water District take care of serious problems. Little has been done to estimate the magnitude of the cumulative problem. There is also a need to coordinate the recommended conservation practices of the local RCD's (such as BMP's for soil erosion) with the mitigation measures attached to project reviews.

Approach

This task consists of the following activities:

1) Survey soil erosion problems outside of city limits

Schedule: April, 1979 - July, 1979

This survey will consist of a description of the magnitude of erosion problems with a corresponding map. This description and map will be prepared by:

- o a review of existing information (soil surveys, USGS papers, SCS and RCD files, etc.)
- o a windshield survey of roadside erosion
- o limited site inspections

2) Review land use practices in rural areas.

Schedule: April, 1979 - July, 1979

This review will focus on those practices which affect the quality and quantity of runoff. These practices and their estimated runoff impacts will be described quantitatively as

much as is feasible. The practices reviewed will include:

- o land management practices to control erosion (such as contour farming, livestock rotation, water spreading and fencing)
- o fertilizer and pesticide application
- o irrigation
- o animal and agricultural waste management
- o farm ponds

3) Evaluate erosion potential in the major growth areas of the county

Schedule: August, 1979 - October, 1979

This evaluation will consist of a map of the major growth areas (both within and outside of city limits) with a corresponding quantitative assessment of erosion potential. This assessment will be prepared using the Universal Soil Loss Equation or a variation thereof. Mitigation measures appropriate for each class of erosion potential will be recommended. These measures will be designed for use as project review guidelines.

4) Develop site specific control plans for selected rural land uses.

Schedule: October, 1979 - March, 1980

These control plans will be developed for certain land uses currently regulated by ordinance. These land uses include:

- o horse stables, paddocks and pastures
- o rangeland for cattle
- o row crops and grain
- o orchard and vineyard

In addition, this activity will include the development of means (such as tax and other financial incentives) to ensure compliance with practices that are now voluntary.

5) Assist ABAG in evaluating and improving urban control measure practices.

Schedule: Continuous through June, 1980

The county will review the control measure cost/effectiveness curves and improvements proposed by ABAG and other counties for applicability to jurisdictions within Santa Clara County (see Tasks 18, 20 and 28). It will include consideration of street sweeping, catch basin cleaning, storm drainage system maintenance and litter control practices.

Responsible Agencies, Budget and Schedule

Santa Clara County Planning Department: 8.7 person-months (\$26,000)

Start date: April, 1979

Completion date: Draft final report - March, 1980

Task completion - June, 1980

Product

- o Map and description of erosion potential in major growth areas for use in project reviews
- o Control plans for specific non-urban sites and land uses, including means to ensure compliance.
- o Cost effective urban runoff control measure improvements for Santa Clara County.
- o Report with corresponding maps showing soil erosion areas outside of city limits and describing rural land use practices which effect runoff quality.

Task 27

Develop an Erosion Control Plan for Calabazas Creek Watershed

Background

Santa Clara County is interested in developing public policy objectives concerning erosion and sediment and instituting effective regulatory programs which implement these objectives. The Calabazas Creek Watershed has been selected as a case study for the development of a model erosion control program. The detailed recommendations resulting from this case study will be applied elsewhere in the County and the region (see Tasks 16 and 26).

The Calabazas Creek Watershed is typical within the county in terms of land use distribution and potential for future erosion problems due to hillside development. The watershed contains a mix of both high and low density residential, cropland, rangeland, horse stables, a County park and off-road vehicle recreation areas. Existing problems in the watershed include streambank and gully erosion, roadside erosion, erosion from construction sites and sheet and rill erosion. The City of Saratoga has requested assistance from the Evergreen RCD to help develop or refine policies and implementation procedures to control the impacts of hillside development.

A considerable amount of physical data related to runoff, sediment and water quality exist in the watershed. Several studies have been conducted to identify erosion types and sediment source areas. These include a USGS hydrology study and reconnaissance surveys by Evergreen RCD and the City of Saratoga.

Approach

This task will include the following activities:

- 1) Inventory existing policies, ordinances, administrative procedures and enforcement practices which affect erosion and sedimentation in the Calabazas Creek watershed.

Schedule: April, 1979 - June, 1979

This inventory will include consideration of the following:

- o General Plan policies
- o area plan policies
- o grading ordinances
- o subdivision ordinances
- o zoning ordinances

- o hillside development ordinances
- o watercourse protection ordinances
- o flood plain regulations
- o project review guidelines
- o EIR guidelines
- o mitigation measures attached to project reviews and permits
- o building and site inspections
- o landscaping guidelines for hillsides
- o regulations regarding drainage changes

The County will focus the majority of the effort on those of the above items judged to be most significant. Other items may be substituted in consultation with ABAG.

- 2) Evaluate the existing policies, ordinances, administrative procedures and enforcement practices in Calabazas Creek watershed.

Schedule: July, 1979 - September, 1979

This evaluation will consider how well the policies, ordinances, etc. address the present and potential problems in the watershed. The evaluation will be made according to the following criteria:

- o ability to achieve the water quality objectives of local government (as stated in Saratoga and Santa Clara County General Plans and ordinances, policies or by-laws of the Evergreen RCD, the Santa Clara County Surface Runoff Plan, etc.)
- o ability to achieve the water quality objectives and policies of federal, state and regional agencies and laws (including EPA, Clean Water Act, State Water Resources Control Board, Regional Water Quality Control Board and the Environmental Management Plan)
- o ability to solve known erosion and siltation problems
- o effectiveness in achieving above objectives

The evaluation will specifically identify those sections of ordinances or regulatory language which are not adequate to

control the problems. It will also answer the question, "Do the ordinances and policies provide sufficient legal basis for adequate enforcement?" In addition, specific administrative procedures and enforcement practices needing improvement will be identified and assessed. As part of this task, for example, the following questions will be addressed:

- o Are there enough site inspections to ensure compliance with ordinances?
- o Do the mitigation measures attached to permits and project reviews reflect the best available information about Best Management Practices?
- o Do developers know what standards for erosion control measures are required to adequately mitigate expected impacts of development?
- o Are developers given sufficient impetus to apply necessary controls?

3) Develop criteria and standards for use in improving ordinances and regulatory procedures.

Schedule: September, 1979 - January, 1980

The criteria will be based on topographic, geologic and hydrologic data for the watershed and on existing information on the effectiveness of BMP's. Appropriate analytical tools, such as the Universal Soil Loss Equation, may also be applied.

Criteria stated in the book Standards and Specifications for Soil Erosion and Sediment Control in Developing areas (SCS, 1975) and the Handbook of Best Management Practices (Council of Bay Area RCD's, 1977) will be considered for application to the study area. These locally adapted criteria will be prepared for adoption as part of existing or new ordinances and regulatory procedures.

4) Develop an effective erosion and sediment control program for Calabazas Creek watershed.

Schedule: November, 1979 - March, 1980

The program will include new or revised policies, ordinances, administrative procedures and enforcement practices which are sufficient to achieve local, regional, state and federal water quality objectives (see activity 2). These improvements will be developed in coordination with the affected agencies. The County will also seek to have the improvements implemented.

Recommendations from this task which may be applicable to other cities and counties will be made available to those jurisdictions (see Tasks 12-18, 22-24, 26 and 28).

Responsible Agencies, Budget & Schedule

Santa Clara County Planning Department: 10 person-months (\$30,000)

Starting date: April, 1979

Completion date: Draft final report - March, 1980

Task completion - June, 1980

Product

- o Effective erosion control program for Calabazas Creek watershed, including:
 - standards and criteria for new or existing regulations
 - proposed ordinance revisions or model ordinances
 - proposed revisions to administrative procedures, project review guidelines and enforcement practices.
- o Inventory and evaluation of existing policies, ordinances, administrative procedures and enforcement practices which affect erosion and sedimentation in the Calabazas Creek watershed

Task 28

Evaluate and Improve Surface Runoff Control Measures in Solano County

Background

Many existing practices within Solano County and its cities provide some control over surface runoff pollution. Most of these practices have been intended primarily to serve other purposes and their effectiveness in controlling surface runoff pollution has not been well evaluated. In addition, these control measures have not been well quantified in level of effort or cost.

Approach

This task will include the following activities:

- 1) Describe control measure practices.

Schedule: April, 1979 - June, 1979

This description should include all jurisdictions within the County or a representative sample (e.g., County, typical large city, typical small city). Two major groups of control measures will be considered: urban and rural. For urban control measures, the following practices will be included:

- o street sweeping
- o catch basin cleaning
- o storm drainage system maintenance
- o litter control

For rural control measures, the following practices will be included:

- o land management practices to control erosion (such as contour farming, livestock rotation, water spreading and fencing)
- o fertilizer and pesticide application
- o irrigation
- o animal and agricultural waste management
- o farm ponds
- o grading for rural construction or farm roads

The urban control measures will be described according to the characteristics below:

- o frequency of sweeping or cleaning by area (e.g., residential, commercial, industrial, open)
- o type of equipment
- o seasonal variations in practice
- o staff training and operating procedure, including follow-up inspection
- o annual expenditure (for each practice in each jurisdiction)

The rural control measures will be described as follows:

- o approximate acreage and location subject to each practice
- o seasonal variations in practice
- o degree of compliance with voluntary conservation plans

Both this activity and activity (2) will emphasize those practices which have the greatest effect on the quality and quantity of runoff. These practices and their estimated runoff impacts will be described quantitatively as much as feasible.

2) Evaluate current control measure practices.

Schedule: June, 1979 - July, 1979

The purpose of this activity is to assess the cost-effectiveness of the practices. The following criteria will be used in this evaluation:

- o Cost per unit pollutant removed (at various operating levels)
- o Percent of total pollutant load or portion of problem controlled by the practice
- o Cost savings due to reduced need for irrigation, fertilization, seeding, etc.

The County will either develop its own cost curves or will review the cost curves provided by ABAG for consistency with local experience.

3) Develop cost-effective, implementable improvements for existing practices.

Schedule: August, 1979 - October, 1979

These improvements should involve little or no increase above current costs and should be developed in conjunction with the affected agencies (for urban practices) and property owners (for rural practices).

This activity will show, using techniques similar to the evaluation of current practices (see activity 2) how the proposed improvements are cost-effective.

- 4) Select improvements for implementation.

Schedule: September, 1979 - October, 1979

The improvements will be selected from the alternatives analyzed in activity (3). This activity will also explain how and why the selections were made.

- 5) Develop detailed procedure and schedule for implementing selected improvements.

Schedule: November, 1979 - March, 1980

This activity will include a sequence of actions for each affected agency and new or revised language (for policies, resolutions, administrative procedures, etc.) for adoption by the appropriate governmental bodies.

In addition, this activity will include the development of means (such as tax and other financial incentives) to ensure compliance with practices that are now voluntary.

County staff will also seek commitments to implement the improvements.

Note: ABAG will coordinate this task with Tasks 20-27, and in particular, Tasks 20 and 26, to minimize duplication of effort and to ensure that at least one detailed improvement procedure for each of the major control practices identified in the region is developed.

Responsible Agencies, Budget and Schedule

Solano County Planning Department: 4.7 person-months (\$14,000)

Starting date: April, 1979
Completion date: Draft final report - March, 1980
Task completion - June, 1980

Product

Cost-effective control measures for surface runoff in Solano County
(detailed report showing proposed improvements, analysis of cost and
effectiveness and procedure for implementation)

Task 29

Reevaluate South Bay Discharge Prohibition.

Background

The discharge of wastewater to the Bay south of the Dumbarton Bridge is prohibited in the San Francisco Bay Basin Plan. The Basin Plan also prohibits discharge to dead-end sloughs and requires an initial dilution of 10-1. Exceptions to each of these can be granted where a discharge is part of an approved reclamation project or where environmental enhancement results from the discharge. It is anticipated that the South Bay Dischargers (San Jose/Santa Clara, Sunnyvale and Palo Alto), who currently violate each of these provisions, will request those exceptions and/or amendments to the Basin Plan necessary to achieve compliance therewith. The Regional Board must act on these requests. Regional Board action is expected to occur in October 1979. The purpose of this task element is to compile the information necessary for the Regional Board to evaluate the SBDA's recommended disposal project and ultimately to make a decision as to the best disposal alternative and possible amendment of the Basin Plan and Bays and Estuary Policy.

Approach

There are a number of specific issues which will form the basis for the decision as to the best disposal alternative for the South Bay Dischargers. It is proposed that the Regional Board will draft an issue paper on each of these subjects and that each will be sent out for review by involved agencies (EPA, SWRCB, DFG, USFWS, & BCDC) and professionals with experience in the respective fields. Where appropriate specific consultants will be contracted with a per diem basis to aid in the preparation of these reports. The issue papers will also be sent to the SBDA and member cities for their review in order to attain a concensus with respect to each issue. These papers will serve as the basis of the staff report on the South Bay Dischargers recommended disposal project. The staff report will be sent out for the normal public review prior to the Regional Board hearing on the matter.

Responsible Agencies, Budget & Schedule

RWQCB: 5 person-months
Consultant:

This task is to be funded separately by the State Water Resources Control Board.

Start date: July, 1979
Completion date: October, 1979

Product

Possible revision to Basin Plan and Bays and Estuaries Policy.

Task 30

Review Water Quality Standards.

Background

Water quality standards are comprised on designated beneficial uses and water quality objectives or criteria established to protect designated beneficial uses. Federal law requires that water quality standards be subject to review at least once every three years. Water quality standards for this Region must be reviewed during FY 78-79.

Approach

A general review of all beneficial use designations and water quality objectives will be performed. In addition to a complete review in FY 78-79, water quality standards will receive an ongoing review as needed or as new information develops in the future. Consideration will be given to the following areas:

1. Updating existing beneficial use designations and water quality objectives.
2. Designating beneficial uses and establishing water quality objectives for water bodies which do not now have specific beneficial uses or objectives.
3. New direction from EPA or the SWRCB regarding water quality standards.

Public input will be achieved through informal Regional Board workshops and formal public hearings prior to Regional Board action on water quality standards.

Responsible Agencies, Budget & Schedule

RWQCB: 7 person-months
Consultant:

This task is to be funded separately by the State Water Resources Control Board.

Start date: April, 1979
Completion date: June, 1980

Product

Possibly revised water quality standards.

Task 31

Update the 20-year Project List.

Background

Federal regulations required a 20-year list of municipal wastewater collection and treatment system needs. The State Clean Water Grant Regulations require the Regional Board to adopt a 5-year priority list annually.

Approach

ABAG staff will update the existing 20-year list in conformance with State and Federal regulations. Recommended projects or changes to be included in the updated 20-year project list will be requested from the wastewater management agencies. All proposed projects and changes will be evaluated on the basis of the updated population and land use projections adopted by ABAG. A draft updated list will then be prepared and will be reviewed by the local agencies and the RWQCB. A final list will be adopted by the RPC of ABAG.

Responsible Agencies, Budget & Schedule

ABAG: 4.3 person-months (\$15,000)

Start date: March 1979

20-year project list due: September 1979

Completion date: Continuous through June, 1980

Product

An updated 20-year municipal facilities list.

Regional Water Quality Control Board Support to Task 31

Approach

The Regional Board will develop and adopt a five-year funding priority list for municipal wastewater treatment facilities based upon ABAG's updated 20-year project list.

Responsible Agency, Budget and Schedule

RWQCB: 3 person-month

Start date: October 1979
Completion date: December 1979

This activity is to be funded separately by the State Water Resources Control Board.

Product

A five-year funding priority list for municipal wastewater treatment facilities.

Task 32

Assess Recreational Benefits of Water Quality Improvements.

Background

The Clean Water Act of 1977 required that 208 plans include an identification of the possible recreational benefits of water quality improvements. Based on ongoing U.S. Fish and Wildlife Service inventory of shoreline resources, secondary benefits of enhancement of water-oriented recreation resulting from water quality improvement projects will have been identified during the transition period prior to 1979.

Approach

Based on an inventory of possible recreation benefits to be prepared as a part of the transition work, further analysis will be made in order to meet requirements of Federal regulations to be published in 1979.

Responsible Agencies, Budget & Schedule

ABAG: 2.8 person-months (\$10,000)

Start date: January 1980
Completion date: March, 1980

Product

An assessment of recreational benefits resulting from 201 wastewater facilities projects.

Task 33

Develop Guidelines for the Control of Individual Wastewater Treatment and Disposal Systems.

Background

Water quality and public health problems can and do develop when individual waste treatment and disposal systems are used inappropriately. The Regional Board has adopted prohibitions against discharge from individual systems in four areas where excessive failure rates existed due to inappropriate installation or use of such systems. Regulatory programs for individual systems must prevent inappropriate installation or use of such systems.

Approach

The Regional Board's Policy on Discrete Sewerage Facilities set forth a program for the regulation of individual systems. That program is based upon local regulation of individual systems and contains three basic elements for Regional Board action:

1. The Regional Board will develop guidelines for the control of individual wastewater treatment and disposal systems as proposed in Water Quality Action 11.1 of the Environmental Management Plan.
2. The Regional Board will periodically review its waivers of the reporting of waste discharge pursuant to Section 13269 of the California Water Code to determine if they should be continued. The criteria by which the Board will determine whether or not to continue the waivers will be the adequacy of local ordinances for the control of individual wastewater treatment and disposal systems and the actions of local agencies in implementing those ordinances.
3. The Regional Board will require assessments of the cumulative impact of discharges from individual wastewater treatment and disposal systems on water quality and public health where the density of systems is such that adverse impacts may occur. The Board will identify each area where such assessments are necessary and will adopt individual time schedules for the appropriate public entity to develop the require report.

Responsible Agencies, Budget & Schedule

RWQCB: 4 person-months

This task will be funded separately by the SWRCB.

Start date: March, 1979

Completion date: February, 1980

Product

During FY's 78-80 the following tasks will be accomplished:

1. Guidelines for the control of individual wastewater treatment and disposal will be developed. This element is required by Water Quality Action 11.1 of the Environmental Management Plan.
2. Candidate areas for cumulative impact studies will be identified. This task will be accomplished under the Regional Board's regulation element of the Water Quality Program.

Task 34

Assess Social, Economic and Environmental Effects of Proposed Actions.

Background

The social, economic and environmental effects of any proposed water quality management actions must be assessed as required by Federal laws and regulations.

Approach

The same general procedures for assessment will be followed as were used in the initial EMP and will fully conform with Federal regulations.

Responsible Agencies, Budget & Schedule

ABAG: 15 person-months (\$53,000)

Start date: July, 1979

Completion date: May, 1980

Product

Assessment of plan updates for social, economic and environmental impacts.

Regional Water Quality Control Board Support to Task 34

Approach

The Regional Board will conduct assessments of its proposed actions.

Responsible Agency, Budget and Schedule

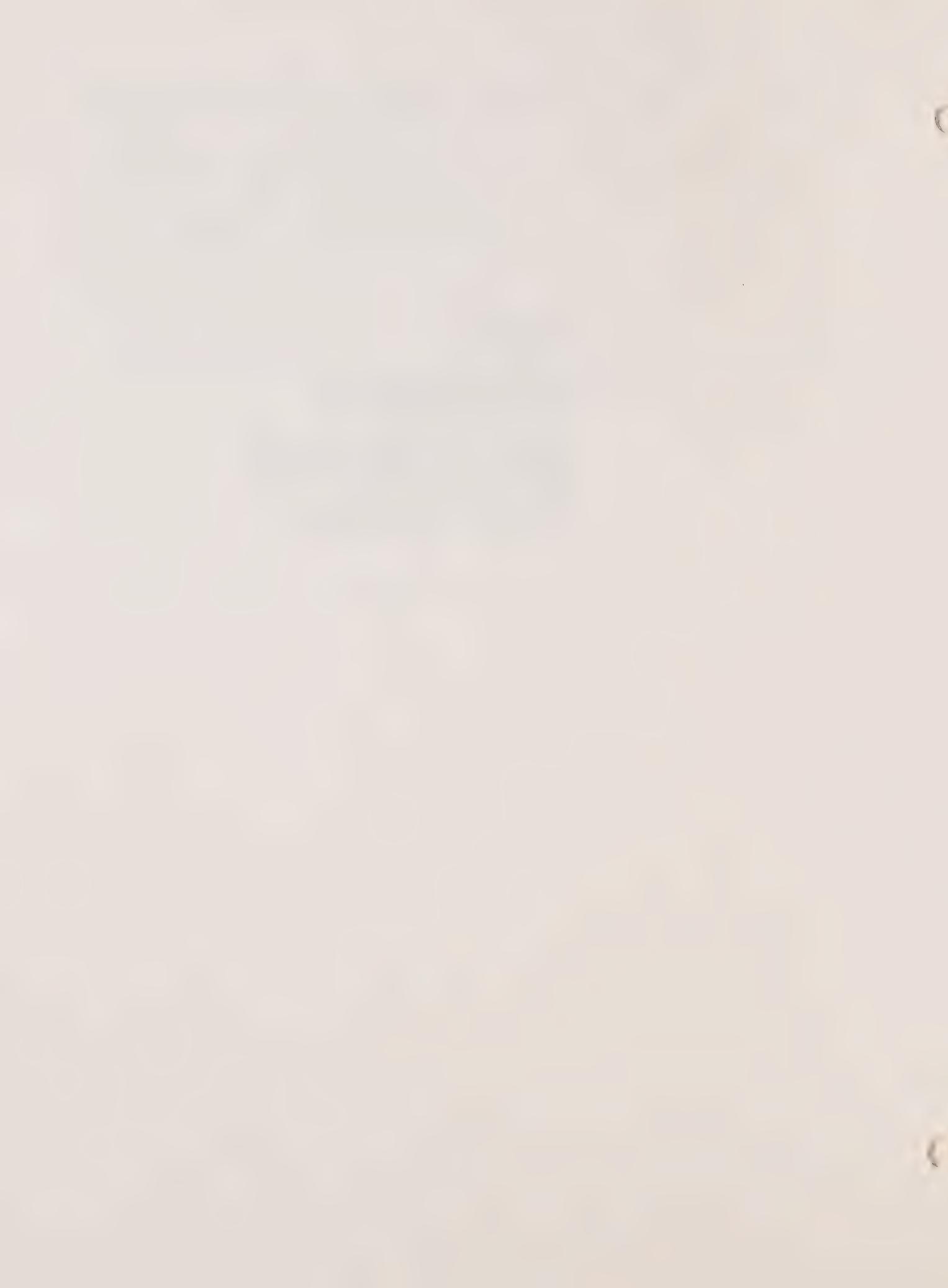
RWQCB: 2 person-months

Start date: July 1979

Completion date: May 1980

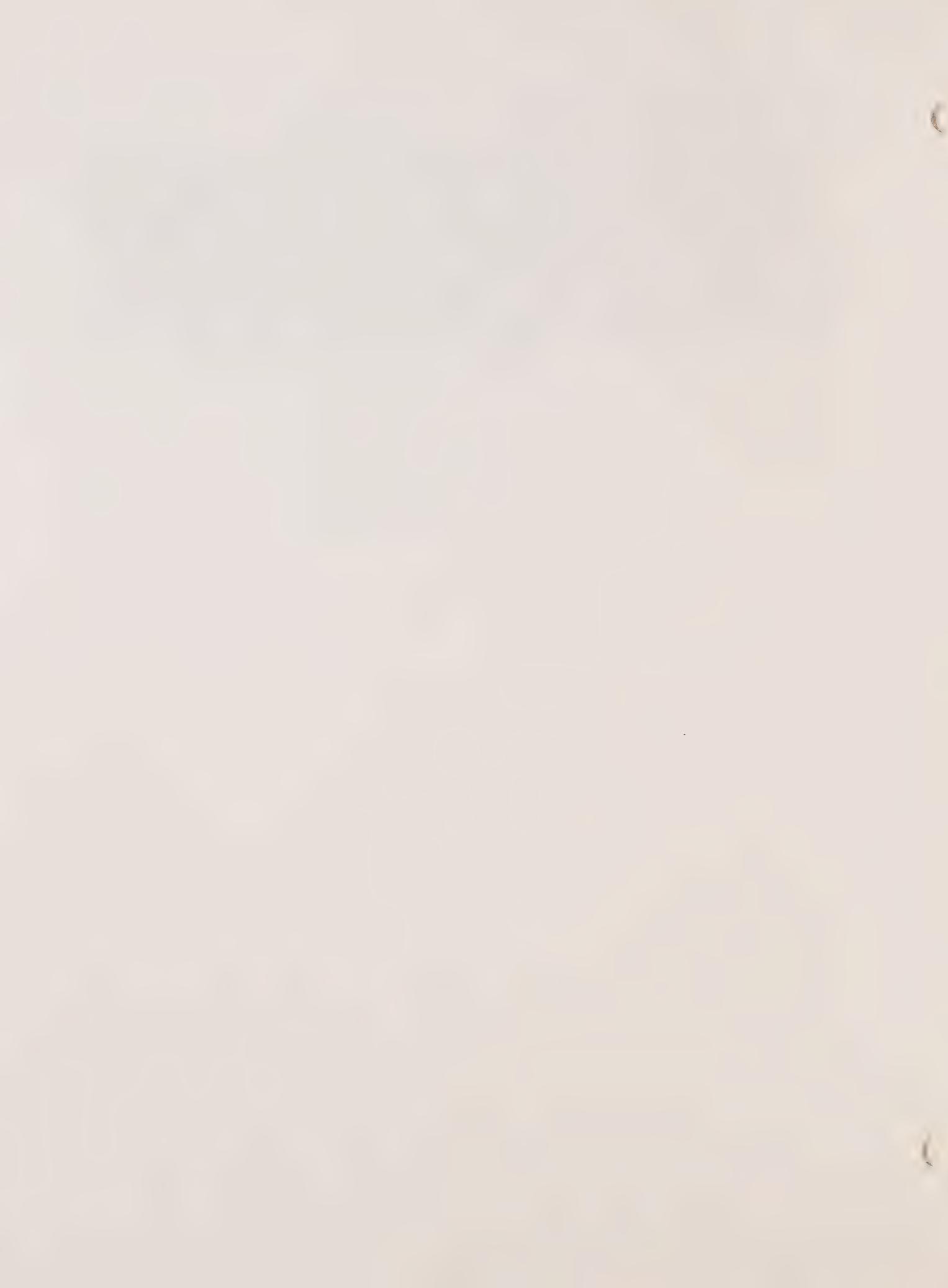
This activity is to be funded separately by the State Water Resources Control Board.

Plan Integration and Approval Work Tasks



Plan Integration and Approval

The actions developed in the continuing planning process must be consistent with the Basin Plan and existing regional policies and plans on air quality and solid waste, housing and economic development. This consistency will be established, to a large extent, in two tasks: 35, plan integration; and 36 policy direction. If the State Water Resources Control Board reaches an agreement with the State Coastal Commission, then local coastal programs will also be coordinated with the EMP's water quality elements. Yet to be determined, and not developed in this workplan, is the procedure for combining the water quality elements of the EMP with the Basin Plan into a single Water Quality Management Plan.



Task 35

Integrate the Water Quality Management Plan with Air Quality and Solid Waste Management Plans.

Background

To retain the concept of an integrated environmental management plan for the Bay Area, the water quality and solid waste management plans must be consistent with each other. In addition, the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) should be consistent with the integrated environmental management plan.

Approach

The effect of each plan on the others will be examined and any cross-plan impacts and inconsistencies identified. Any cross-plan inconsistencies will be resolved.

Responsible Agencies, Budget & Schedule

ABAG: 3 person-months (\$10,500)

Start date: October 1979

Completion date: June 1980

Product

Identification and resolution of inconsistencies among plans, and technical memorandum describing integration process.

Regional Water Quality Control Board Support to Task 35

Approach

The Regional Board will contribute to integrating its water quality policies and actions with the remainder of the ABAG Environmental Management Plan, including air quality, solid waste management, and other water quality portions of the plan. The Regional Board's approach to plan integration will be consistent with and coordinated with that undertaken by ABAG.

Responsible Agency, Budget and Schedule

RWQCB: 1 person-month

Start date: October 1979

Completion date: June 1980

This activity is to be funded separately by the State Water Resources Control Board.

Task 36

Provide Policy Direction and Obtain Plan Approval.

Background

In order to maintain the role of local elected officials and special interest groups in water quality management, an appropriate policy body must be serviced and maintained.

Approach

The policy body for ABAG's activities will be ABAG's Regional Planning Committee. Meetings will be held at approximately monthly intervals. All products of the joint RWQCB/ABAG work program funded by 208 program funds will be reviewed by both the RPC and the RWQCB. Administrative staff for the program will assure consistency of the program with the workplan and the directions of the RPC and will provide services to the RPC.

Responsible Agencies, Budget & Schedule

ABAG: 19 person-months	(\$66,000)
Per diem	10,000
Printing and Mailing	20,000
	<u>(\$96,000)</u>

Start date: April 1979

RPC plan approval: April 1980

Executive Board plan approval: May 1980

General Assembly plan approval: June 1980

Product

Meetings, management decisions, policy direction, and an adopted water quality portion of the EMP.

Regional Water Quality Control Board Support to Task 36

Approach

The Regional Board will review the products of the joint workplan. Staff will assist the RPC as necessary, within budgetary constraints.

Responsible Agency, Budget and Schedule

RWQCB: 2 person-months

Start date: April 1979
Completion date: June 1980

This activity is to be funded separately by the State Water Resources Control Board.

Task 37

Maintain a Public Participation Program.

Background

One of the major expectations of the 1972 Federal Water Pollution Control Act Amendments was that the public would play a key decision-making role in all water pollution control activities. An analysis of the public participation program conducted by ABAG during preparation, review and approval of the initial Environmental Management Plan indicates that the public did indeed play a pivotal role throughout the process. To cite perhaps the most significant example, virtually every major recommendation made by the Environmental Management Task Force was accepted by ABAG's Regional Planning Committee, Executive Board and General Assembly.

Regulations recently adopted by EPA for public participation programs under the Resource Conservation and Recovery Act, the Safe Drinking Water Act, and the Clean Water Act indicate a continued emphasis on aiding public education, creating plans that are sensitive to local needs and values, and furthering support for plan implementation. These Federal regulations, as well as local preference, require that this support program be continued.

Approach

ABAG will take all necessary steps to ensure that its 208 public participation program is in full conformance with the EPA public participation regulations that became effective February 16, 1979.

The approach will continue to be based on two major premises:

1. Public information is a necessary prerequisite for meaningful, active public involvement, and
2. Citizens need to be given a selection of activities through which to participate in decision-making; for example, seminars, workshops, conferences, public meetings and hearings, written testimony, service on policy or technical advisory committees.

As in the previous effort, the "public" is divided into four groups whose interests must be equitably balanced during the planning process: (1) public officials, (2) representatives of public interest groups, (3) citizens or representatives of organizations with substantial economic interests in the plan, and (4) private citizens. Each of these categories is clearly defined in the EPA regulations.

ABAG's Regional Planning Committee and Citizen Services Committee will be the two main entities guiding decision-making and public participation in the planning process. Final decision-making authority is vested with the agency's Executive Board and General Assembly.

Working with these persons, professional staff will foster public awareness of and participation in each of the four distinct planning phases: problem definition, control measure development, plan integration/approval, and plan implementation.

Audiences will be identified and matched with their preferred channels of communication and mechanisms for participation. More emphasis will be placed this time on news media relations during each of the four phases of plan preparation, responding to the one unanimous conclusion drawn from the assessment of the initial EMP public participation program: overall public awareness was insufficient. More time also will be devoted to the development of survey tools for use in mailed materials and at workshops and other meetings. There continues to be insufficient funding for professionally developed surveys that would be administered periodically on a random sample basis throughout the region. Student and other volunteer assistance will be sought instead. Every effort will be made in this program to provide adequate program and procedural information to participants without overwhelming them with materials, a frequent criticism in the past. Often, timeliness and clarity were sacrificed for comprehensiveness.

Finally, for the public participation staff to maintain credibility with the news media, elected officials, and the community, they must make time for liaison with other ABAG programs; other regional agencies' staff; county lead agencies; other local public and private agencies working on water pollution prevention; and the appropriate State and Federal offices.

Responsible Agencies, Budget and Schedule

ABAG: 22 person-months (\$ 77,000)
Printing and expenses (37,000)
<hr/>
\$114,000

Start date: April 1979
Completion date: June 1980

Product

General Assembly; workshops, advisory and policy committee meetings, public hearings; Speakers' Bureau; depository libraries; news releases and PSAs; radio/TV interviews; articles for ABAG and other general and technical publications; fact sheets, flyers, plan summaries, and tabloids; correspondence and written responses to public comments; mailing lists and rosters; responsiveness summaries and evaluations; an adopted Water Quality Management Plan.

Regional Water Quality Control Board Support to Task 37

Approach

On those tasks for which the RWQCB is the responsible agency, the Board will provide ABAG with materials for publication and distribution within budgetary constraints. RWQCB staff will attend some public meetings as program participants.

Responsible Agencies, Budget and Schedule

RWQCB: 3 person-months

Start date: April 1979

Completion date: June 1980

This activity is to be funded separately by the State Water Resources Control Board.

Task 38

Coordinate Local Coastal Programs with the Water Quality Management Plan.

Background

The California Coastal Act of 1976 requires that cities and counties along the State's coast prepare Local Coastal Programs that bring local plans and policies into conformance with State policies. The LCP's must specifically indicate kinds and intensity of land and water uses and applicable resource protection and development policies to accomplish Coastal Act objectives. Among the issues that must be addressed are water quality and marine resource management. The EMP contains regional policies on water quality and supply with which the local governments are also required to comply. The local coastal planning should be monitored and reviewed by the designated agency and the State to assist in resolving conflicts and ensure compliance.

Approach

A Memorandum of Understanding will be developed between SWRCB and CCC to clarify the roles of the SWRCB and ABAG in Local Coastal Programs. ABAG will act in a monitoring and reviewing function to ensure that water quality protection provided by local coastal plans is consistent with regional policy embodied in the EMP and the County surface runoff management plans. This will include working with the Coastal Commission and cities and counties to identify conflicts between coastal resource policies and EMP policies and to determine actions that could be taken both within and outside the coastal zone to mitigate potential impacts. The EMP, the Basin Plan, and the Regional Plan will be used as the basis for evaluating local government planning in the coastal zone.

Responsible Agencies, Budget & Schedule

ABAG: 3 person-months (\$10,500)

Start date: Effective date of Memorandum of Understanding
Completion date: June 1980

This task was removed from consideration for funding during EPA/ABAG discussions on the draft workplan. It is now required as a condition of the Continuing Planning Process grant. Since the need for the task is dependent upon an agreement between the SWRCB and the CCC, its implementation is uncertain and it is not included in the workplan budget. Additional funding for this task would be requested from EPA.

Product

Identification of water quality elements that may be impacted by or should be included in Local Coastal Programs, review of Local Coastal Programs, consistency of Local Coastal Programs with the EMP, Basin Plan and Regional Plan.

Regional Water Quality Control Board Support to Task 38

Approach

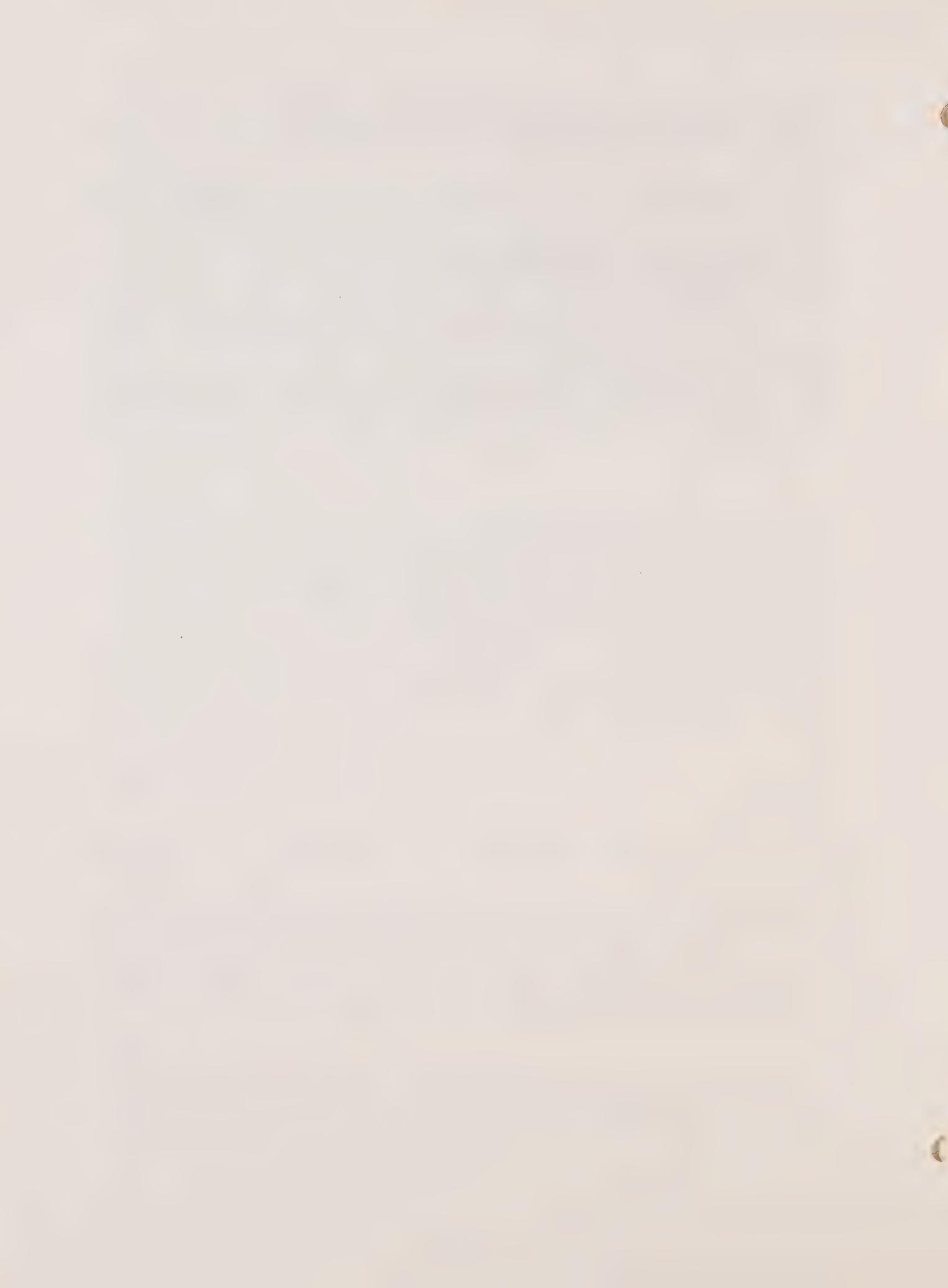
The RWQCB would review local coastal plans for consistency with the Basin Plan.

Responsible Agencies, Budget and Schedule

RWQCB: 1 person-month

Start date: Effective date of Memorandum of Understanding
Completion date: June 1980

This activity is to be funded separately by the State Water Resources Control Board.



Plan Implementation Work Tasks

Plan Implementation

Management agreements are now being sought from agencies identified in the EMP as implementing or responsible agencies. Control measures that would be developed during 1979-80 and adopted into the EMP would need new management agreements for implementation. In addition to obtaining these agreements, plans must be developed for the effective implementation of certain actions in the current EMP. Specific activities include:

- o Obtain management agreements for future control measures
- o Develop implementation program for rural Best Management Practices
- o Review projects through A-95
- o Obtain local adoption of Regional Growth Projections
- o Coordinate Local Coastal Programs with the WQMP
- o Provide for the safe and managed use of San Francisco Bay shellfish.

Task 39

Obtain Local Endorsement of Use of Regional Growth Projections.

Background

The liaison program with cities and counties, begun in ABAG's 1976-1978 environmental planning effort, needs to be continued to provide for assessment of changing local development policies impact on environmental objectives. Such liaison is also essential to determine possible inconsistencies between regional environmental objectives and regional objectives for housing and economic development as currently implemented by local jurisdictions. Clarification of regional/local policy conflicts is essential to obtaining local jurisdictions' endorsements of the continued use of regional growth projections.

Approach

ABAG staff will continue the established liaison program with cities and counties, and expand its scope in those jurisdictions where it may be determined that regional/local policy differences preclude local endorsement of the use of regional projections. A three cycle approach would reach the objective of regionwide endorsement of the projections by means of successively more in-depth consultation with those jurisdictions where problems are encountered in the first cycle.

Cycle One: Accomplish one general cycle of review in over 100 jurisdictions via the already established working arrangements with the Technical Advisory Committee and the previously 208-funded county contract agencies. Determine jurisdictions that will endorse projections without further consideration.

Cycle Two: Accomplish second-cycle in-depth consultation with non-endorsing jurisdictions. Refine the working arrangements for regional/local consultation in the application of regional growth projections by state agencies, as provided in Guidelines for the Use of Regional Projections previously adopted by the ABAG Executive Board. These guidelines may be modified by ABAG as a result of negotiations with the EPA.

Cycle Three: If required, accomplish third-cycle consultations to review and update special information. Establish regional/local working arrangements in all jurisdictions for periodic local review and update of technical and policy assumptions underlying the regional growth projections. Where appropriate, determine what technical indicators and reporting formats would make the regional growth projections more applicable to city and county planning programs so as to facilitate the next (annual) review and endorsement. This cycle is a contingency activity

for the resolution of unusually difficult problem areas.

Responsible Agencies, Budget and Schedule

Cycle One: General review in all 100 jurisdictions

ABAG: 20 person-months (\$35,000)
Start date: July 1979
Completion: October 1979

Cycle Two: In-depth consultation with non-endorsing jurisdictions

ABAG: 7 person-months (\$25,000)
Start date: October 1979
Completion: January 1980

Total \$60,000

Cycle Three: Special consultation in those jurisdictions where required to review and update special information

ABAG: 6-1/2 person-months (\$23,000)
Start date: January 1980
Completion: June 1980

This task is not included among the draft workplan items originally approved by EPA. EPA has indicated that this task would be eligible for incremental funding and therefore it is not included in the workplan budget total. It is estimated that a minimum budget for this task would be \$60,000 for cycles 1 and 2. Funding decisions on cycle 3 could be delayed until the results of the initial work can be assessed.

Product

Resolutions from each city and/or county endorsing the continued use of regional projections in ABAG regional planning programs, consistent with guidelines for their use as adopted by the ABAG Executive Board.

Task 40

Review Projects Through A-95.

Background

A-95 refers to Circular A-95 issued by the President's Office of Management and Budget (OMB). The Circular implements legislation directing the President to "establish rules and regulations governing the formulation, evaluation and review of Federal programs and projects having a significant impact on area and community development." In addition, the Circular is designed to assist the implementation of the National Environmental Policy Act of 1969 and the Civil Rights Act of 1964.

The Circular acts as a guide to Federal agencies. Its procedures and requirements are intended to ensure that federal activities--whether through grants or through actions directly undertaken by federal agencies--do not conflict with the development objectives of other levels of government. Owing to the importance the Circular places on intergovernmental cooperation and the number and complexity of federal programs, OMB has assigned the administration of the Circular's procedures to State and metropolitan "clearinghouses." ABAG has been designated by OMB as the metropolitan clearinghouse for the nine-county Bay Area.

Approach

As a part of its ongoing A-95 activities, ABAG will review all proposed federally funded projects that would have an effect on the Water Quality Management Plan.

When ABAG receives the notice of intent from a project applicant, ABAG will determine within 30 days whether or not there are any issues raised by the proposal. If there are, ABAG will make arrangements for negotiating their resolution. If the identified issues and problems have not been resolved, ABAG will conduct a formal review of the application. Upon the completion of review, ABAG will supply its comments to the applicant. According to existing procedures, the applicant must forward these comments to the Federal funding agency as part of the application.

Responsible Agencies, Budget & Schedule

ABAG: 4.3 person-months (\$15,000)

Start date: April 1979
Completion date: June 1980

Product

- o Comments on federally funded projects that would have an effect on the Water Quality Management Plan.
- o Assurance of consistency between proposed projects and the Water Quality Management Plan.

Task 41

Secure Management Agreements with Implementing Agencies.

Background

Each management agency identified in the Water Quality Management Plan, pursuant to Federal regulations, must indicate its willingness to carry out the responsibilities assigned to it by the plan. These commitments are necessary before the Governor can designate management agencies to implement the plan. Agreements must specify the management agencies' responsibilities, existing and needed legal authority, schedules for action, and financing arrangements.

Approach

ABAG staff will prepare draft resolutions appropriate to each significant management agency. Resolutions will be reviewed by EPA. Working with staff of the implementing agency ABAG staff will attempt to get a resolution satisfactory to all parties approved by the policy body of the agency in question. The significant management agencies from whom these agreements may have to be sought include the Bay Area's nine counties and 93 cities as well as a large number of special districts, regional agencies and state departments.

Responsible Agencies, Budget & Schedule

ABAG: 6.3 person-months (\$22,000)
Counties: 4 person-months (12,000)

Start date: June 1980
Completion date: August 1980

Product

Management agreements for the implementation of new policies and actions in the Water Quality Management Plan.

Regional Water Quality Support to Task 41

Approach

The Regional Board will be responsible for securing management agency agreements for policies and actions that it develops in the Joint Work Program. Additionally, it will review a draft resolution to be used by ABAG in completing this task.

Responsible Agency, Budget and Schedule

RWQCB: 2 person-months

Start date: June 1980
Completion date: August 1980

This activity is to be funded separately by the State Water Resources Control Board.

Task 42

Coordinate and Develop Implementation Plan for Rural BMP's.

Background

Surface runoff from rural watersheds contributes sediments, pesticides, herbicides and nutrients to surface waters of the region. The county surface runoff plans assign to resource conservation districts the task of reducing surface runoff pollution from rural areas. ABAG and the Council of Bay Area Resource Conservation Districts have prepared a handbook of best management practices specifically tailored to rural areas in this region. Individual resource conservation districts need assistance in translating the handbook into effective programs in the field. A mechanism is needed to facilitate the coordination of RCD planning activities, to provide information on RCD water quality management activities to public agencies and general public, to provide RCDs with specialized assistance to develop erosion control and surface runoff management programs, and to provide RCDs with assistance to develop formal working relationships with counties and other water quality management agencies.

Approach

The following work elements would be undertaken by the Council:

- 1) Facilitate the exchange of information among RCDs with respect to common water quality management issues - planning, institutional arrangements, and implementation.

Schedule: Continuous

- 2) Provide a liaison between regional water quality management agencies and RCDs to ensure that RCDs are up-to-date with water quality management approaches.

Schedule: Continuous

- 3) Develop public education information to increase the visibility of RCDs in local media.

Schedule: Continuous

- 4) Assist in RCD work plan preparation.

Schedule: Continuous

- 5) Assist RCDs in developing guidelines for administrative management and specifically determining criteria for selection of critical watersheds.

Schedule: April 1979 - June 1979

- 6) Monitor and prepare an annual report on all watershed projects carried out by RCD's in the Bay Area.

Schedule: April 1979 - November 1979

- 7) Develop recommended modifications and procedures in existing county programs and design cooperative programs with respective counties to ensure the continuation of 208 planning process.

Schedule: June 1979 - February 1980

- 8) Assist RCDs in the application of Handbook of BMPs within the context of 208 program.

Schedule: June 1979 - October 1979

- 9) Develop technical assistance programs for RCDs to provide private landowners with programs that implement BMPs to address erosion/surface runoff problems.

Schedule: June 1979 - October 1979

- 10) Develop procedures for assessing the effectiveness of County Regulatory Programs specifically addressing erosion control and surface runoff problems.

Schedule: June 1979 - August 1979

- 11) Assist RCDs to have input into the development or modification of ordinance language.

Schedule: September 1979 - November 1979

- 12) Assist RCDs to develop formal institutional relationships.

Schedule: December 1979 - January 1980

- 13) Assist in the development of institutional arrangements among RCDs to address regional erosion and surface runoff management problems.

Schedule: January 1980 - March 1980

- 14) Assist RCDs in preparation of funding proposals and Grant Applications for water quality planning and/or implementation.

Schedule: January 1980 - March 1980

- 15) Prepare a report on task activities.

Schedule: January 1980 - March 1980.

Responsible Agencies, Budget & Schedule

CBARCD: 14.8 person-months (\$44,300)

Start date: April, 1979
Draft Final Report: March 1980
Task Completion: June 1980

Product

- o Meetings, summary progress reports, guidance material, news releases.
- o Guidelines for RCD work plan preparation and administrative management.
- o Annual report on RCD watershed projects in the Bay Area.
- o Recommended modifications and procedures in existing county programs to be integrated with the areawide 208 continuing planning.
- o Applications manual for the Handbook of BMPs.
- o Technical assistance programs.
- o Assessment Procedures Manual for county regulatory programs.
- o Guidelines for ordinance modification and development.
- o Guidelines for institutional arrangements.
- o Guidelines for financial assistance and grant applications.
- o Summary report of task activities.

Task 43

Develop Program to Permit the Safe, Managed Use of San Francisco Bay Shellfish

Background

San Francisco Bay at one time supplied most of California's shellfish used in commercial trade. Cultured oysters supplied between 2 and 15 million pounds annually and softshell clams were harvested in abundance. Pollution started a decline in the oyster fishery beginning around 1900, and progressively worse pollution resulted in closure of the shellfish beds during the 1930's. Subsequently, no commercial shellfish operations have been permitted in the bay.

Shellfish grown in the bay are not currently considered safe to use because of existing or potential contamination. Continuing improvements in the quality of municipal discharges are expected to result in improvement in the quality of shellfish.

The overall objective of this program is to permit the safe and managed use of the existing shellfish resource and to realize the bay's potential for commercial shellfish culture. A shellfish program is required by the EMP.

Approach

The Regional Water Quality Control Board and the State Water Resources Control Board have recently initiated a pilot study of one shellfish area in the bay. This program proposes to expand on this effort, but still to retain the basic concept of studying one area intensely and trying to resolve all the complex issues which will permit the safe and managed use of its shellfish.

Based on what is learned during the pilot study (which corresponds to Phases 1 and 2 of the proposed program) a more scaled-down program can hopefully be developed to look at other shellfish areas. The third phase will last about three years and study about one-third of the other shellfish areas in the bay each year.

This workplan task describes ABAG's role in the shellfish program. An ABAG representative would sit on the policy level board of program directors. This activity is included in the task budget estimate. ABAG could provide public participation services to the shellfish program. Such services could include ABAG's water quality advisory committee, computer prepared mailing lists, brochures, newsletters and the like. Substantial savings can be offered to the shellfish program through the use ABAG's existing system. Public participation services are not included in the task budget description and would be funded by contract with the RWQCB.

Responsible Agencies, Budget and Schedule

ABAG: 1 person-month (\$3,500) for policy level representation

Funding for this task is contingent upon availability of monies for an approved task workplan, which is being prepared by the RWQCB/SWRCB. This task budget is not included in the workplan budget.

Start date: April 1979
Completion date: September 1980

Product

A comprehensive sanitary survey; a shellfish management plan; and appropriate permits for the commercial use of shellfish from the study area.

Task 44

Monitor and Evaluate Plan Implementation.

Background

This task involves an evaluation program for the water quality portions of the Environmental Management Plan. The task is essential for guiding the continuing planning process. It will consist of tracking both current planning as well as implementation of the existing plan.

Approach

ABAG will undertake an evaluation program for the water quality portions of the EMP, with special emphasis on the surface runoff element. This evaluation shall be coordinated with the semiannual evaluation meetings held by ABAG, the State Water Resources Control Board and EPA. Reports will be prepared semiannually and submitted at least three weeks prior to the semiannual evaluation; the first such report will be prepared by June 1, 1979. Copies of the report will be made available to the San Francisco Bay Regional Water Quality Control Board, State Water Resources Control Board, and EPA.

Content of the report shall include, but not be limited to the following:

1. A discussion of the status of implementation of the water quality portions of the EMP.
2. An assessment of performance of identified management agencies, their accomplishments in carrying out the plans, and a review of their progress relative to commitments and schedules contained in management agency agreements which have been or will be obtained.
3. Status of financing programs for carrying out the plans.
4. An assessment of the effectiveness of the plans in managing sources of water pollution, particularly surface runoff.
5. Based on the above, an identification of deficiencies in the content and implementation of the water quality portions of the EMP, and establishment or corrective programs to remedy these deficiencies.
6. A status report and budget summary for tasks in the approved continuing planning process Work Program.

Responsible Agencies, Budget and Schedule

ABAG: 9 person-months (\$31,500)

Start date: March 1979
Completion date: June 1978

This task is not included among the draft workplan items originally approved by EPA. EPA has indicated that this task may be eligible for incremental funding and therefore it is not included in the workplan budget total.

Product

Semiannual reports, the first to be submitted on July 1, 1979, as detailed above.

WORKPLAN ORGANIZATION

The workplan is divided into four major work phases: problem definition, control measure development, plan integration and approval, and plan implementation. The relationship among tasks in the four phases is graphically presented in Figure III-1, Proposed Workplan Organization. Efforts performed in the problem definition phase may result in the development of control measures which would be integrated into the Water Quality Management Plan and finally implemented after plan adoption.

Of particular note in the program organization chart are the dashed task elements and products. They represent work that is either not performed under the 208 program or is performed by the SWRCB for the 208 program. This work substantially expands the impact of the Water Quality Management Program through total integration with other environmental planning in the Bay Area.

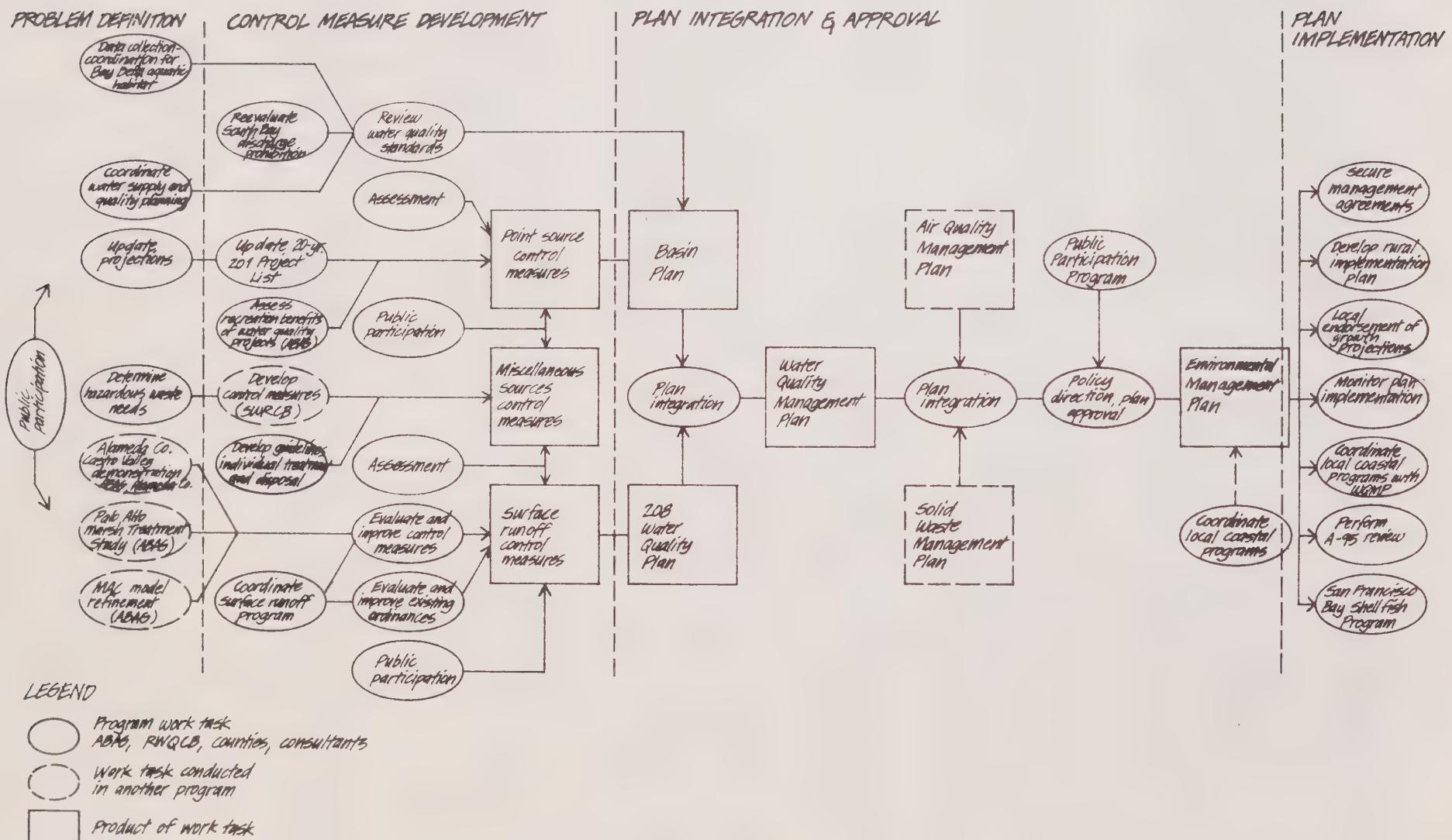
The SWRCB has indicated that it would develop Statewide policy for controlling pollution associated with hazardous wastes disposal. Definition of the problem within the San Francisco Bay would provide valuable insight and support for State efforts.

Two demonstration programs, funded directly by EPA, will be performed in 1979. Alameda County will demonstrate the effectiveness of alternative street cleaning measures upon reducing surface runoff pollution in Castro Valley. ABAG and its consultants will demonstrate and quantify the stormwater treatment efficiency of a marsh/flood control basin in Palo Alto. Both projects will provide invaluable information to local counties, as well as the rest of the nation, on the effectiveness of certain control measures.

During the development of the Environmental Management Plan, ABAG used a macroscopic (MAC) model to predict pollution from stormwater runoff. A current contract with EPA will enable ABAG and its consultants to refine the model for greater accuracy while increasing its simplicity for easier application. This effort may enable counties to perform their own modeling in future planning.

Additionally, ABAG has a major role in the development of Air Quality and Solid Waste Management Plans for the Bay Area. The Water Quality Management Plan will be integrated with these plans for consistency within the overall Environmental Management Plan.

Figure III-1. JOINT WORKPLAN ORGANIZATION FOR THE 1979 SAN FRANCISCO BAY
AREAWIDE WATER QUALITY MANAGEMENT PROGRAM



SUMMARY OF PRODUCTS

The products of the joint workplan will be:

Point Source Control Measures

- o Coordinated and improved water quality monitoring and estuarine research
- o Possible revision to Basin Plan on subject of South Bay discharge prohibition
- o Revised water quality standards
- o Updated projections of population, land use and wastewater flow
- o Local endorsement of population, land use and wastewater flow
- o An updated 20-year municipal wastewater treatment facilities list
- o Assessment of recreational benefits resulting from "201" wastewater facilities projects.

Surface Runoff Control Measures

- o Coordinated surface runoff control planning
- o Assessment of existing surface runoff control measures
- o Control measures to protect urban lakes
- o Model ordinances and performance standards
- o Technical assistance to counties to increase effectiveness of control measures
- o Updates of county plans, ordinances, performance standards, erosion control plans, EIR guidelines, written reports and educational materials
- o Implementation program for rural best management practices
- o Financing guidelines for implementation of best management practices by individual resource conservation districts.

Miscellaneous Control Measures

- o Recommendations for future hazardous waste disposal site capacity
- o Guidelines for the control of individual wastewater treatment and disposal
- o Coordinated water supply and water quality planning activities

- o A program for the safe use of San Francisco Bay shellfish.

Products Common to all Measures

- o Social, economic and environmental assessment of plan updates
- o A single Water Quality Management Plan for the San Francisco Bay Area
- o Integration of water quality, air quality, and solid waste management plans into a single Environmental Management Plan
- o Participation of locally elected officials and public representatives in all phases of plan development
- o Public participation in all phases of plan development
- o Management agreements for the implementation of control measures
- o Consistency of local coastal programs with the Water Quality Management Plan
- o Assessment of plan implementation
- o Potential improvements in management and financing arrangements
- o Coordination of Federally funded activities with the Water Quality Management Plan.

IV. SCHEDULE

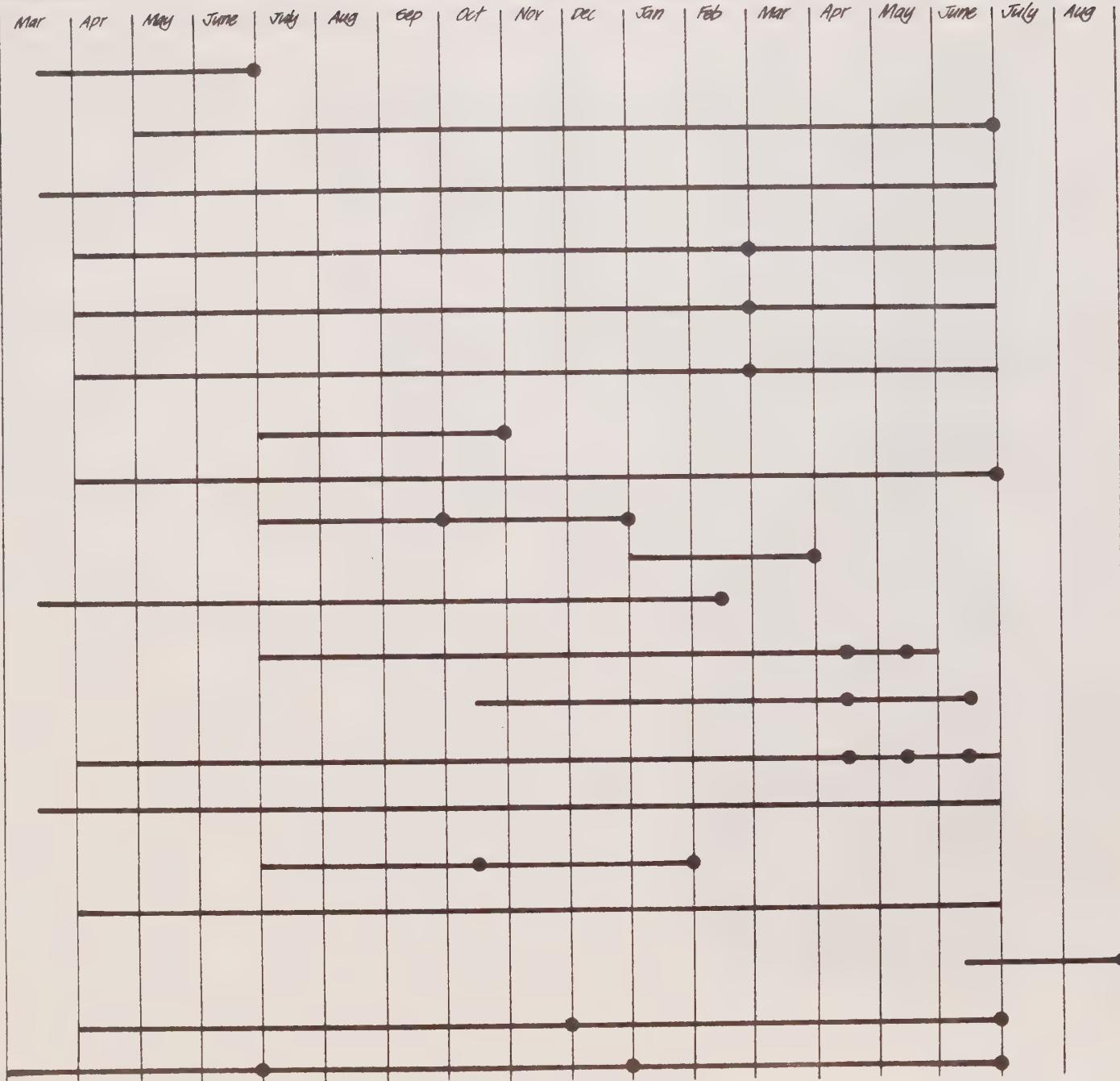
The proposed workplan schedule is shown graphically in Figure IV-1. Periods of performance for the major program elements are shown along with a termination point. Detailed scheduling for individual task elements is presented with each task description. Certain program elements are not depicted in Figure IV-1. Those elements depend upon schedules to be developed at the State level and are identified in the Figure.

Table IV-1 provides monthly summaries of program milestones. These summaries may be used to monitor the progress of the program for each planning participant.

Figure IV-1. PROGRAM SCHEDULE

● = Task products due. See task descriptions.

1. Update population projections
2. Coordinate water supply and quality
- 5-11. Coordinate surface runoff planning
- 12-17. Improve surface runoff ordinances
- 18, 20, 26, 28. Improve s.r. control measures
- 19, 21-25, 27. Develop lakes & watersheds plans
29. Reevaluate South Bay discharge prohibition
30. Review water quality standards
31. Update 20-year list
32. Assess recreational benefits
33. Develop septic tank guidelines
34. Assess impacts of proposed actions
35. Integrate plans
36. Policy direction and plan approval
37. Public participation program
38. Obtain local growth projections endorsement
40. Review projects through A95
41. Secure management agreements
42. Implementation plan for rural BMP's
44. Monitor plan implementation



Note: tasks 3, 4, 38 and 43 are not shown because their schedules depend upon activities of the SWRCB.

Table IV-1 Monthly Work Plan Schedule and Program Milestones

Month: March, 1979

ABAG:

- o Start updating population projections (Task 1)
- o Initiate work on all surface runoff tasks (Tasks 5, 12, 18, 19)
- o Start monitoring plan implementation (Task 44)

RWQCB:

- o Start development of individual wastewater treatment guidelines and waivers (Task 33)

Table IV-I Monthly Work Plan Schedule and Program Milestones

Month: April, 1979

ABAG:

- o Start inventory of surface runoff related ordinances (Task 12)

RWQCB:

- o Start reviewing Water Quality Standards (Task 30)

Alameda County:

- o Submit work plan (Task 6)
- o Initiate work on all task (Tasks 6, 13, 20, 21, 22)

Contra Costa County:

- o Submit work plan (Task 7)
- o Initiate work on all task (Tasks 7, 14)

Marin County:

- o Submit work plan (Task 8)
- o Initiate work on all tasks (Task 8, 23)

San Mateo County:

- o Submit work plan (Task 9)
- o Initiate work on all tasks (Tasks 9, 15, 24, 25)

Santa Clara County:

- o Submit work plan (Task 10)
- o Initiate work on all tasks (Tasks 10, 16, 26, 27)
- o Start inventory of regulatory programs related to erosion control (Task 16)

Solano County:

- o Submit work plan (Task 11)
- o Initiate work on all tasks (Tasks 11, 17, 28)

BACRCD:

- o Submit work plan (Task 42)
- o Start assisting RCDs in project management and administrative matters (Task 42)
- o Start monitoring all RCD watershed projects (Task 42)

Table IV-I Monthly Work Plan Schedule and Program Milestones

Month: May, 1979

Alameda County:

- o Complete description of current surface runoff control measures (Task 20)

Contra Costa County:

- o Completion of study checklist and EIR guidelines related to construction erosion (Task 14)

Table IV-I Monthly Work Plan Schedule and Program Milestones

Month: June, 1979

ABAG:

- o Start development of surface runoff related ordinance evaluation criteria (Task 12)
- o Complete disaggregation of pollution projections and obtain General Assembly adoption (Task 1)

Alameda County:

- o Complete inventory on surface runoff and watercourses related regulatory programs (Task 13)
- o Start evaluation of surface runoff control measures (Task 20)
- o Complete erosion and sediment data and information collection in Cull Canyon (Task 22)

Contra Costa County:

- o Start revision of conservation control measures related to erosion (Task 14)

San Mateo County:

- o Complete development of BMPs for Pescadero Creek Watershed (Task 24)
- o Complete identification of pollutants entering into San Mateo Lagoon (Task 25)

Santa Clara County:

- o Complete inventory of erosion related regulatory programs countywide (Task 16)
- o Complete inventory of regulatory programs impacting Calabazas Creek Watershed (Task 27)

Solano County:

- o Complete inventory of surface runoff related regulatory programs countywide (Task 17)

- o Complete description of surface runoff control measures countywide (Task 28)
- o Start evaluation of surface runoff control measures countywide (Task 28)

BACRCD:

- o Start development of recommendations for county programs in rural runoff control (Task 42)
- o Assist RCDs in BMP applications in rural areas (Task 42)
- o Start development of technical assistance programs in rural runoff control (Task 42)
- o Start development of assessment procedures for rural runoff control measures (Task 42)

Table IV-I Monthly Work Plan Schedule and Program Milestones

Month: July, 1979

ABAG:

- o Complete inventory of surface runoff control measures regionwide (Task 18)
- o Start general review of population projections with 100 jurisdictions (Task 39)
- o Submit status report on plan implementation (Task 44)
- o Start assessments (social, economic, environmental impacts) support activities (Task 34)

RWQCB:

- o Start reevaluation of South Bay discharge prohibition (Task 29)

Alameda County:

- o Submit 1st quarterly progress report (Task 6)
- o Start evaluation of surface runoff regulatory programs countywide (Task 13)
- o Complete evaluation of surface runoff control measures, countywide (Task 20)
- o Complete identification of pollutants entering Lake Merritt (Task 21)
- o Start development of pollution control measures for Lake Merritt (Task 21)
- o Start development of erosion control programs for Cull Canyon (Task 22)

Contra Costa County:

- o Submit 1st quarterly progress report (Task 7)

Marin County:

- o Submit 1st quarterly progress report (Task 8)

San Mateo County:

- o Submit 1st quarterly progress report (Task 9)
- o Complete evaluation of conservation control measures countywide (Task 15)
- o Complete evaluation of component conservation practices countywide (Task 15)
- o Start development of erosion related conservation plans for Pescadero Creek Watershed (Task 24)
- o Start evaluation of control practices for San Mateo Lagoon (Task 25)

Santa Clara County:

- o Submit 1st quarterly progress report (Task 10)
- o Start evaluation of erosion related regulatory programs countywide (Task 16)
- o Complete survey of erosion problems outside city limits countywide (Task 26)
- o Complete review of land use practices in terms of erosion and runoff (Task 26)
- o Start evaluation of erosion related regulatory programs for Calabazas Creek Watershed (Task 27)

Solano County:

- o Submit 1st quarterly progress report (Task 11)
- o Start evaluation of surface runoff regulatory programs countywide (Task 17)
- o Complete evaluation of surface runoff control measures countywide (Task 28)

BACRCD:

- o Submit 1st quarterly progress report (Task 42)

Table IV-I Monthly Work Plan Schedule and Program Milestones

Month: August, 1979

ABAG:

- o Submit 1st quarterly progress report (Task 5)
- o Complete inventory of surface runoff related ordinances regionwide (Task 12)
- o Start assessment of surface runoff control measure effectiveness, regionwide (Task 18)

Alameda County:

- o Start development of cost-effective surface runoff controls countywide (Task 20)

San Mateo County:

- o Start development of supplement BMPs for development review process countywide (Task 15)

Santa Clara County:

- o Start evaluation of erosion potential in growth areas countywide (Task 26)

Solano County:

- o Start development of cost-effective improvements for surface runoff control measures countywide (Task 28)

BACRCD:

- o Complete development of assessment procedures for rural BMP applications (Task 42)

Table IV-I Monthly Work Plan Schedule and Program Milestones

Month: September, 1979

ABAG:

- o Complete the updated 20-year municipal facilities list (Task 31)

Alameda County:

- o Complete evaluation of surface runoff and watercourse related regulations countywide (Task 13)

Contra Costa County:

- o Complete revision of conservation control measures to reduce construction erosion countywide (Task 14)

Marin County:

- o Complete development of performance standards for Nicasio Valley Watershed (Task 23)

San Mateo County:

- o Complete development of supplemental measures for development review process (Task 15)

Santa Clara County:

- o Complete evaluation of erosion related control programs for Calabazas Creek Watershed (Task 27)
- o Start development of criteria for erosion related control program improvements for Calabazas Creek Watershed (Task 27)

Solano County:

- o Start selection of improvements for implementation of surface runoff control measures countywide (Task 28)

BACRCD:

- o Assist RCDs in rural runoff related ordinance development regionwide (Task 42)

Table IV-1. Monthly Work Plan Schedule and Program Milestones

Month: October, 1979

ABAG:

- o Complete development of surface runoff related ordinance evaluation criteria regionwide (Task 12)
- o Start surface runoff related ordinance evaluation regionwide (Task 12)
- o Complete assessment of surface runoff control measure effectiveness regionwide (Task 18)
- o Start integrating water, air and solid waste plans (Task 35)
- o Complete review of population projections with 100 jurisdictions (Task 39)
- o Start in-depth consultation with non-endorsing jurisdictions (Task 39)

RWQCB:

- o Start integration of water, air, and solid waste plans (Task 35)
- o Possible amendments to Basin Plan (Task 29)
- o Start development of funding priority list for wastewater treatment plants (Task 31)

ALAMEDA COUNTY:

- o Start development of model watercourse protection ordinance (Task 13)
- o Complete development of cost-effective surface runoff controls (Task 20)
- o Start development of improvements for surface runoff controls countywide (Task 20)
- o Complete development of pollution control measures for Lake Merritt (Task 21)

CONTRA COSTA COUNTY:

- o Start development of supplemental BMPs to reduce construction erosion countywide (Task 14)

MARIN COUNTY:

- o Start development of transfer of development rights for Nicasio Valley watershed (Task 23)

SAN MATEO COUNTY:

- o Start review of current erosion control measures countywide (Task 15)
- o Complete development of erosion related conservation plans for Pescadero Creek watershed (Task 24)
- o Complete evaluation of pollution control practices for San Mateo Lagoon (Task 25)

SANTA CLARA COUNTY:

- o Complete evaluation of erosion related regulatory programs countywide (Task 16)
- o Complete evaluation of erosion potential of growth areas countywide (Task 26)
- o Start development of site specific surface runoff control plans countywide (Task 26)

SOLANO COUNTY:

- o Submit 2nd quarterly progress report (Task 11)
- o Complete evaluation of surface runoff related regulatory programs countywide (Task 17)
- o Complete development of cost-effective improvements for surface runoff controls countywide (Task 28)
- o Complete improvements for implementation of surface runoff controls countywide (Task 28)

BACRCD:

- o Submit 2nd quarterly progress report (Task 42)
- o Complete assistance in rural BMP applications regionwide (Task 42)
- o Complete development of technical assistance programs for RCDs for rural runoff control regionwide (Task 42)

Table IV-1. Monthly Work Plan Schedule and Program Milestones

Month: November, 1979

ABAG:

- o Complete surface runoff related ordinance evaluation regionwide (Task 12)
- o Start development of surface runoff related model ordinances (Task 12)
- o Start development of cost-effective surface runoff controls regionwide (Task 18)

ALAMEDA COUNTY:

- o Submit 2nd quarterly progress report (Task 6)
- o Complete development of improvements for surface runoff controls countywide (Task 20)
- o Start development of implementation of surface runoff controls (Task 20)
- o Start development of pollution control programs for Lake Merritt (Task 21)
- o Complete development of erosion control programs for Cull Canyon (Task 22)

CONTRA COSTA COUNTY:

- o Submit 2nd quarterly progress report (Task 7)

MARIN COUNTY:

- o Submit 2nd quarterly progress report (Task 8)

SAN MATEO COUNTY:

- o Submit 2nd quarterly progress report (Task 9)
- o Start development of runoff control implementation and monitoring for Pescadero Creek watershed (Task 24)
- o Start development of alternative pollution control measures for San Mateo Lagoon (Task 25)

SANTA CLARA COUNTY:

- o Submit 2nd quarterly progress report (Task 10)

- o Start development of improvements for erosion control countywide (Task 16)
- o Start development of erosion and sediment control programs for Calabazas Creek watershed (Task 27)

SOLANO COUNTY:

- o Submit 2nd quarterly progress report (Task 11)
- o Start development of improvements for runoff control ordinances countywide (Task 17)
- o Start development of implementation procedures for surface runoff control countywide (Task 28)

BACRCD:

- o Submit 2nd quarterly progress report (task 42)
- o Submit annual report on RCD watershed projects regionwide (Task 42)
- o Complete assistance to RCDs in rural runoff ordinance development regionwide (Task 42)

Table IV-1. Monthly Work Plan Schedule and Program Milestones

Month: December, 1979

ABAG:

- o Submit 2nd quarterly progress report (Task 5)
- o Complete development of cost-effective surface runoff controls regionwide (Task 18)
- o Start development of surface runoff control programs regionwide (Task 18)
- o Submit status report on plan implementation (Task 44)

RWQCB:

- o Adopt 5-year funding priority list for municipal wastewater treatment plants (Task 31)

ALAMEDA COUNTY:

- o Start development of regulatory improvements for runoff control countywide (Task 13)
- o Start obtaining implementation commitments for Cull Canyon erosion control programs (Task 22)

CONTRA COSTA COUNTY:

- o Complete development of supplemental BMPs to reduce construction erosion countywide (Task 14)

SAN MATEO COUNTY:

- o Complete review of current construction erosion related control measures countywide (Task 15)
- o Complete development of erosion control plan implementation and monitoring for Pescadero Creek watershed (Task 24)

BACRCD:

- o Assist RCDs in preparing institutional relationships regionwide (Task 42)

Table IV-1. Monthly Work Plan Schedule and Program Milestones

Month: January, 1980

ABAG:

- o Start assessment of recreational benefits (Task 32)
- o Complete in-depth consultation with non-endorsing jurisdictions (Task 39)

ALAMEDA COUNTY:

- o Complete development of pollution control programs for Lake Merritt (Task 21)
- o Start obtaining implementation commitments for Lake Merritt pollution control programs (Task 21)
- o Complete implementation commitments for Cull Canyon erosion control plans (Task 22)

CONTRA COSTA COUNTY:

- o Start development of the project approval conditions (Task 14)

MARIN COUNTY:

- o Complete development of transfer of development rights for Nicasio Valley watershed (Task 23)

SAN MATEO COUNTY:

- o Start development of construction erosion related guidelines and ordinance revisions (Task 15)
- o Start development of technical assistance schedules and funding sources for Pescadero Creek erosion control plans (Task 24)
- o Start development of a sediment monitoring program at Pescadero Creek (Task 24)
- o Complete development of alternative pollution control measures for San Mateo Lagoon (Task 25)

SANTA CLARA COUNTY:

- o Complete development of criteria for erosion control program improvements for Calabazas Creek watershed (Task 27)

BACRCD:

- o Complete assistance to RCDs in development of institutional relationships (Task 42)
- o Assistance in developing regional arrangements among RCDs (Task 42)
- o Assistance in developing funding proposals and grant applications for RCD programs (Task 42)
- o Prepare annual report (Task 42)

Table IV-1. Monthly Work Plan Schedule and Program Milestones

Month: February, 1980

RWQCB:

- o Complete individual wastewater treatment guidelines and identify candidate areas for cumulative impact studies (Task 33)

ALAMEDA COUNTY:

- o Start development of financial assistance proposals for Cull Canyon erosion control programs (Task 22)

MARIN COUNTY:

- o Start obtaining implementation commitments for Nicasio Valley watershed surface runoff control programs (Task 23)

SAN MATEO COUNTY:

- o Start development of pollution control program for San Mateo Lagoon (Task 25)

BACRCD:

- o Complete county program recommendations for RCDs regionwide (Task 42)

Table IV-1. Monthly Work Plan Schedule and Program Milestones

Month: March, 1980

ABAG:

- o Complete development of surface runoff related model ordinances regionwide (Task 12)
- o Submit draft final report (Task 12)
- o Complete development of surface runoff control programs regionwide (Task 18)
- o Submit draft final report (Task 18)
- o Complete assessment of recreational benefits (Task 32)

ALAMEDA COUNTY:

- o Submit 3rd quarterly progress report (Task 6)
- o Complete development of a model watercourse ordinance (Task 13)
- o Complete development of surface runoff regulatory improvements (Task 13)
- o Submit draft final report (Task 13)
- o Complete development of implementation of surface runoff programs countywide (Task 20)
- o Submit draft final report (Task 20)
- o Complete implementation commitments for Lake Merritt Pollution Control Program (Task 21)
- o Submit draft final report (Task 21)
- o Complete financial assistance proposals for Cull Canyon erosion control plans (Task 22)
- o Submit draft final report (Task 22)

CONTRA COSTA COUNTY:

- o Submit 3rd quarterly progress report (Task 7)
- o Complete development of project approval process related to construction erosion countywide (Task 14)

- o Submit draft final report (Task 14)

MARIN COUNTY:

- o Submit 3rd quarterly progress report (Task 8)
- o Complete implementation commitments for Nicasio Valley surface runoff control program (Task 23)
- o Submit draft final report (Task 23)

SAN MATEO COUNTY:

- o Submit 3rd quarterly progress report (Task 9)
- o Complete revisions of construction erosion related guidelines and ordinances countywide (Task 15)
- o Submit draft final report (Task 15)
- o Complete development of technical assistance schedules and funding sources for Pescadero Creek erosion control plans (Task 24)
- o Complete development of a sediment monitoring program at Pescadero Creek (Task 24)
- o Submit draft final report (Task 24)
- o Complete development of pollution control program for San Mateo Lagoon (Task 25)
- o Submit draft final report (Task 25)

SANTA CLARA COUNTY:

- o Submit 3rd quarterly progress report (Task 10)
- o Complete development of improvements for erosion control ordinances (Task 16)
- o Submit draft final report (Task 16)
- o Complete development of site specific surface runoff control plans countywide (Task 26)
- o Submit draft final report (Task 26)
- o Complete development of erosion and sediment control programs for Calabazas Creek watershed (Task 27)

- o Submit draft final report (Task 27)

SOLANO COUNTY:

- o Submit 3rd quarterly progress report (Task 11)
- o Complete development of improvements for surface runoff related ordinances countywide (Task 17)
- o Submit draft final report (Task 17)
- o Complete development of implementation procedures for surface runoff control programs (Task 28)
- o Submit draft final report (Task 28)

BACRCD:

- o Submit 3rd quarterly progress report (Task 42)
- o Complete assistance in developing RCD inter-relationships (Task 42)
- o Complete assistance in developing funding proposals and grant applications (Task 42)
- o Submit draft final report (Task 42)

Table IV-1. Monthly Work Plan Schedule and Program Milestones

Month: April, 1980

ABAG:

- o Submit 3rd quarterly progress report (Task 5)
- o Plan approval by Regional Planning Committee (Task 36)

Table IV-1. Monthly Work Plan Schedule and Program Milestones

Month: May, 1980

ABAG:

- o Plan approval by ABAG Executive Board (Task 36)
- o Complete assessment (social, economic, environmental impacts) of recommendations (Task 34)

Summary of Major Activities, Milestones, and Products

Month: June, 1980

ABAG:

- o Complete Task 12
- o Complete Task 18
- o Complete Task 19
- o Complete disaggregation of population projections and obtain General Assembly adoption (Task 1)
- o Complete integration of water, air and solid waste plans (Task 35)
- o Plan approval by ABAG General Assembly (Task 36)
- o Start securing management agreements with implementing agencies (Task 31)
- o Submit status report on plan implementation (Task 44)

RWQCB:

- o Complete integration of water, air and solid waste plans (Task 35)
- o Possible revision of water quality standards (Task 30)
- o Start securing management agreements (Task 41)

ALAMEDA COUNTY:

- o Complete Task 13
- o Complete Task 20
- o Complete Task 21
- o Complete Task 22

CONTRA COSTA COUNTY:

- o Complete Task 14

MARIN COUNTY:

- o Complete Task 23

SAN MATEO COUNTY:

- o Complete Task 15
- o Complete Task 24
- o Complete Task 25

SANTA CLARA COUNTY:

- o Complete Task 16
- o Complete Task 26
- o Complete Task 27

SOLANO COUNTY:

- o Complete Task 27
- o Complete Task 28

Table IV-1. Monthly Work Plan Schedule and Program Milestones

Month: July, 1980

ABAG:

- o Complete Task 5

ALAMEDA COUNTY:

- o Complete Task 6

CONTRA COSTA COUNTY:

- o Complete Task 7

MARIN COUNTY:

- o Complete Task 8

SAN MATEO COUNTY:

- o Complete Task 9

SANTA CLARA COUNTY:

- o Complete Task 10

SOLANO COUNTY:

- o Complete Task 11

BACRCD:

- o Complete Task 42

Table IV-1. Monthly Work Plan Schedule and Program Milestones

Month: August, 1980

ABAG:

- o Complete effort to secure management agreements with implementing agencies (Task 41)

RWQCB:

- o Complete securing management agreements (Task 41)

V. PROGRAM ORGANIZATION

The following is a brief description of the responsibilities of various agencies mentioned in the joint workplan.

A. Environmental Protection Agency

EPA will approve the revisions to the official water quality management plan after they have been certified by the State Water Resources Control Board, acting as the Governor's agent. Plan revisions will then be incorporated into the plan, which is the basis for EPA action in the region, including the distribution of construction grants for publicly owned wastewater treatment works.

B. State Water Resources Control Board

The State Board is the Governor's certifying agent for the official water quality management plan for the San Francisco Bay. The State Board will request that ABAG and the Regional Board adopt the plan before the State Board certifies it.

C. ABAG Executive Board and Regional Planning Committee

The Regional Planning Committee is the key policy-making body for ABAG's portion of the joint workplan. The composition of this committee includes representatives from the Bay Area's cities and counties, citizen groups and special interest groups. The Regional Planning Committee will also recommend that the ABAG Executive Board approve plan revisions for incorporation into the Comprehensive Regional Plan.

D. Regional Water Quality Control Board

The Regional Board will be the key policy-making body for its own portion of the Work Program. The Board is a nine-member panel appointed by the Governor. The Regional Board will also recommend that plan revisions be incorporated into the San Francisco Bay Basin Plan.

E. ABAG Staff and County Lead Agencies

Key ABAG staff members will manage the ABAG portions of the Joint Work Program on a day-to-day basis under the direction of the Regional Planning Committee. In addition, each county will have a lead agency responsible for the work performed in the county under contract to ABAG. This work will be mostly in surface runoff.

F. Regional Board Staff

The Regional Board staff will play much the same role as ABAG staff in managing the Board's portions of the joint workplan. Staff direction will come from the Board.

G. Consultants

ABAG, the Regional Board and county lead agencies will use consultants either to complete certain tasks in the joint workplan or to provide specialized technical services in support of the preparation of plan revisions.

H. Technical Advisory Committees

These committees will advise ABAG and the Regional Board. They will include persons with expertise from public agencies, citizen groups, and others.

I. Other Local, Regional, State and Federal Agencies

The Joint Work Program will be carried out with the cooperation of other agencies not listed elsewhere in this section. Among these agencies are the U.S. Army Corps of Engineers, the U.S. Geological Survey, the Bay Conservation and Development Commission, the State Solid Waste Management Board, the Wastewater Solids Study, local agencies additional to the county lead agencies, and others.

In addition to the above agencies, the public will be involved in the planning process through the public participation program. The program will function to prescribe and comment on the preparation of plan revisions and on the completion of the Joint Work Program. This involvement will take place for the benefit of both the policy bodies of the Regional Board and ABAG as well as their staffs.

VI. BUDGET

The proposed budget for the final version of the joint workplan is presented in Table VI-1. Budget allocations for individual tasks have been identified for individual participating agencies and include both the 75 percent EPA grant and 25 percent local contribution. Each allocation represents personnel costs, direct expenses, and overhead. Special printing costs for brochures, circulars, public announcements, memoranda and plan copies have been allocated within two workplan elements: (36) Provide policy direction and obtain plan approval; and (37) Maintain a public participation program.

The workplan budget totals \$900,000. It does not include the supporting activities of the RWQCB. Those activities would be funded directly from the SWRCB under their proposed 208 funding allocation of 13 February 1979. The budget also does not include ABAG participation in several tasks which would be administered by the SWRCB. These tasks would have separate budget allocations out of the Statewide 208 allotment and should include funding for all participants. Finally, three tasks -- (38) Coordinate local coastal programs with the Water Quality Management Plan, (39) Obtain local endorsement of use of regional growth projections, and (44) Monitor plan implementation -- also are not included in the workplan budget. These tasks constitute additional activities not approved by EPA during negotiations on the draft joint workplan. Task (38) is dependent upon a possible future agreement between the SWRCB and the State Coastal Commission and its accomplishment is thus less certain. ABAG is seeking incremental funding to accomplish these three tasks. If such funding is not provided, these tasks would be accomplished at some reduced level of effort and at the expense of other tasks in the workplan.

The proposed budget distribution is summarized as follows:

<u>Category</u>	<u>Amount, \$1000</u>	<u>Percent</u>
Problem Definition	43.0	5
Control Measure Development	543.2	55
Plan and Approval Integration	220.5	25
Plan Implementation	93.3	15
Total	900	100

Of the \$900,000 budget total, \$675,000 would be provided by a Federal grant and \$225,000 must be raised as a local match. The following distribution by major program participants helps to clarify local match requirements:

<u>Participant</u>	<u>Grant Funds, \$</u>	<u>Local Match, \$</u>	<u>Total, \$</u>
ABAG	381,525	127,175	508,700
Alameda County	81,375	27,125	108,500
Contra Costa County	9,000	3,000	12,000
Marin County	33,000	11,000	44,000
Santa Clara County	55,500	18,500	74,000
San Mateo County	55,125	18,375	73,500
Solano County	26,250	8,750	35,000
Bay Area Council of Resource Conservation Districts	33,225	11,075	44,300

TABLE VI - 1

Continuing Planning Process

Budget Allocations

(February 1979 - June 1980)

Workplan Element	Responsible Agency	Proposed Budget, \$1000
<u>Problem Definition</u>		
1. Update, population projections	ABAG	36.0
2. Coordinate water supply and water quality planning	ABAG	7.0
3. Participate in planning of data collection and problem assessment	ABAG RWQCB	10.5 ^a - ^b
4. Determine hazardous waste disposal needs	ABAG RWQCB	17.5 ^a - ^b
<u>Control Measure Development</u>		
5. Coordinate regional surface runoff program	ABAG RWQCB	35.0 - ^b
6. Coordinate Alameda Co. surface runoff program	Alameda Co.	6.0
7. Coordinate Contra Costa Co. surface runoff program	Contra Costa Co.	4.0
8. Coordinate Marin Co. surface runoff program	Marin Co.	4.0
9. Coordinate San Mateo Co. surface runoff program	San Mateo Co.	6.0
10. Coordinate Santa Clara Co. surface runoff program	Santa Clara Co.	6.0
11. Coordinate Solano Co. surface runoff program	Solano Co.	4.0
12. Improve surface runoff related ordinances regionwide	ABAG	42.7
13. Develop model watercourse protection ordinance	Alameda Co.	9.5

Workplan Element	Responsible Agency	Proposed Budget, \$1,000
14. Improve EIR process to reduce construction erosion	Contra Costa Co.	8.0
15. Incorporate BMPs into development review process	San Mateo Co.	12.0
16. Improve erosion control ordinances in Santa Clara Co.	Santa Clara Co.	9.0
17. Improve surface runoff related ordinances in Solano County	Solano Co.	14.0
18. Evaluate and improve surface runoff control measures region-wide	ABAG	42.0
19. Coordinate urban lakes programs	ABAG	10.5
20. Evaluate and improve public works practices	Alameda Co.	15.0
21. Develop pollution control plan for Lake Merritt	Alameda Co.	45.0
22. Develop erosion control plan for Cull Canyon	Alameda Co.	30.0
23. Develop water quality protection plan for Nicasio Valley	Marin Co.	40.0
24. Develop erosion control plan for Pescadero Creek Watershed	San Mateo Co.	22.5
25. Develop pollution control plan for San Mateo Lagoon	San Mateo Co.	30.0
26. Review and improve agricultural and erosion control practices in Santa Clara Co.	Santa Clara Co.	26.0
27. Develop erosion control plan for Calabazas Creek Watershed	Santa Clara Co.	30.0
28. Evaluate and improve surface runoff control measures in Solano Co.	Solano Co.	14.0
29. Reevaluate South Bay discharge prohibition	RWQCB	- b
30. Review water quality standards	RWQCB	- b

Workplan Element	Responsible Agency	Proposed Budget, \$1,000
31. Update the 20-year project list and project priority list	ABAG RWQCB	15.0 - b
32. Assess recreational benefits of water quality improvements	ABAG	10.0
33. Develop guidelines for individual wastewater treatment and disposal systems	RWQCB	- b
34. Assess social, economic, and environmental impacts of proposed actions	ABAG RWQCB	53.0 - b

Plan Integration and Approval

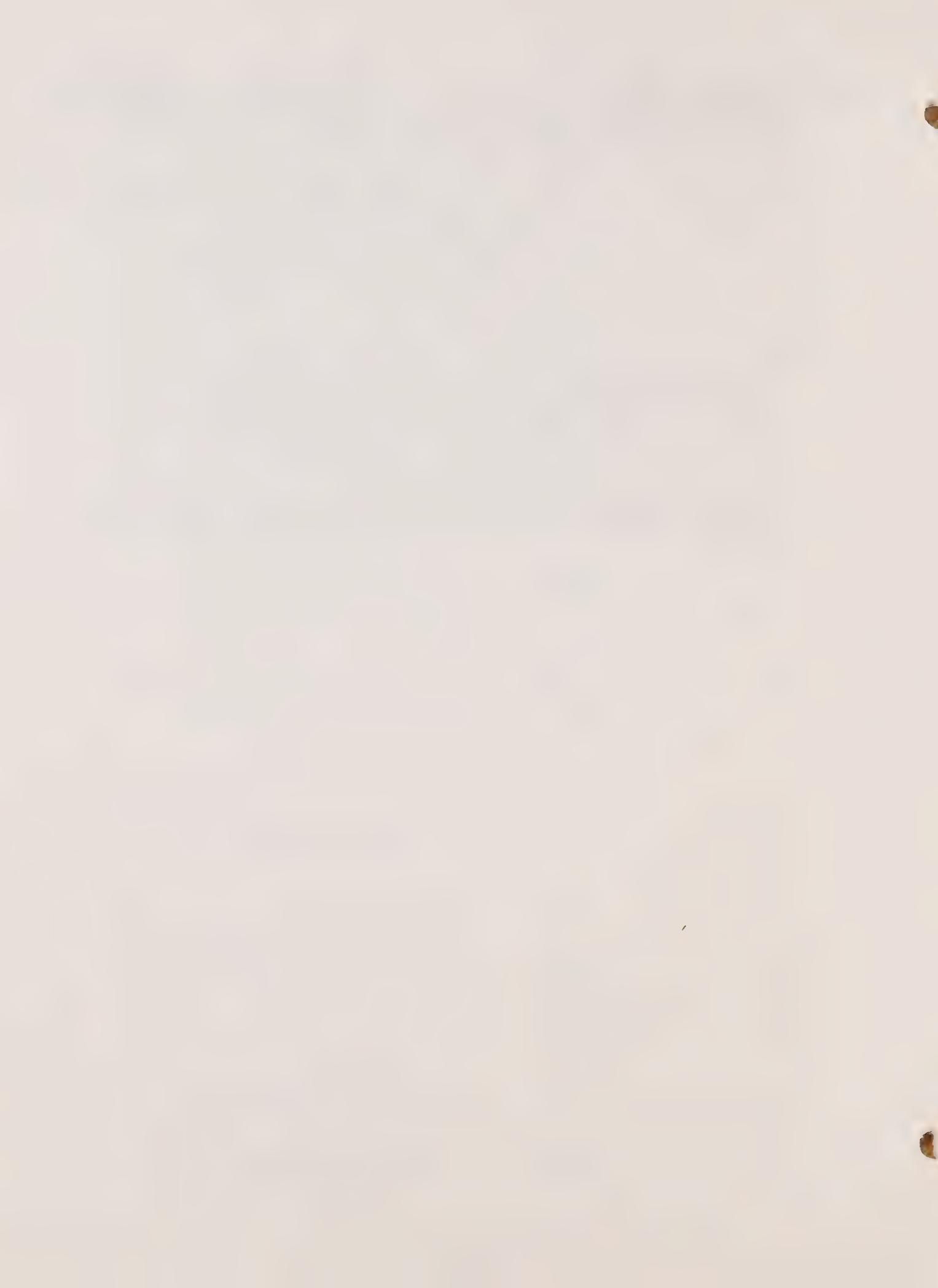
35. Integrate water quality plan with air quality and solid waste plans	ABAG RWQCB	10.5 - b
36. Provide policy direction and obtain plan approval	ABAG RWQCB	96.0 - b
37. Maintain a public participation program	ABAG RWQCB	114.0 - b
38. Coordinate local coastal programs with the Water Quality Management Plan	ABAG RWQCB	10.5 ^c - b

Plan Implementation

39. Obtain local endorsement of use of regional growth projections	ABAG	60.0 ^c
40. Review projects through A-95	ABAG	15.0
41. Secure management agreements with implementing agencies	ABAG RWQCB San Mateo Co. Santa Clara Co. Alameda Co. Solano Co.	22.0 - b 3.0 3.0 3.0 3.0
42. Develop implementation plan for rural RMPs.	BACRCD	44.3
43. Develop program to permit safe, managed use of San Francisco Bay shellfish	ABAG RWQCB	3.5 ^a - b

Workplan Element	Responsible Agency	Proposed Budget, \$1,000
44. Monitor plan implementation	ABAG	31.5 ^c
	Total, workplan	900.0
	Total, potential additional tasks	133.5

- a Funding for this task is contingent upon availability of monies for an approved task workplan, which is being prepared by the SWRCB. This task budget is not included in the workplan budget.
- b RWQCB activities are to be funded directly from the SWRCB.
- c The full scope of this task would be undertaken only with additional funding from EPA. This task is not included in the total workplan budget.



APPENDIX A

Remaining Tasks of Proposed 1979 Work Plan

This appendix contains those tasks which are presently not included as part of the 1979 program due to funding limitations. Proposed budgets and priorities of these tasks are listed in Tables A-1 and A-2. Table A-2 lists separately the surface runoff program tasks.

Should EPA make further funding available, a selection of tasks will be made for approval out of this appendix based on already assigned priorities and budgets. However, such priorities and budgets could be changed at a later date based on the progress of the continuing planning program.

Task descriptions for tasks of priority 1 and 2 are included.

Content

- o Table A-1: Budget Summary of Remaining Tasks of Proposed 1979 ABAG/RWQCB Joint Work Plan
- o Table A-2: Budget Summary of Remaining Tasks of Proposed 1979 ABAG Surface Runoff Program
- o Table A-3: Task Descriptions of Priority 1 and 2 tasks

TABLE A-1. BUDGET SUMMARY OF REMAINING TASKS OF PROPOSED
1979 ABAG/RWQCB JOINT WORK PLAN

TASK	PRIORITY	BUDGET (\$)
<u>Problem Definition</u>		
o Define Magnitude of Pesticide Discharges to Surface Waters	3	21,000
o Survey Abandoned Mines	3	23,000
o Develop Information on Edgerly Island Septic Tank Systems	3	9,000
o Analyze Effect of the Safe Drinking Water Act	3	10,500
o Assess Management and Protection of Groundwaters	2	12,000
o Participate in the Evaluation of Constraints to Interagency Water Transfers	3	<u>3,500</u>
Total		79,000
<u>Control Measure Development</u>		
o Revise Dredging and Spoil Disposal Policy	2	18,000
o Develop Water Quality Management Policy for Alameda Creek Watershed	2	18,000
o Evaluate Alternatives for Chlorine Substitution	3	33,500
o Participate in the Plan Development for San Joaquin Agricultural Drainwater Disposal	2	10,500
o Investigate Control Measures for Inland Chemical Spills	2	<u>83,000</u>
Total		163,000
<u>Plan Integration and Approval</u>		
o Update the Basin Plan and Integrate it with the EMP	1	<u>22,500</u>
Total		22,500
<u>Plan Implementation</u>		
o Develop Governmental and Financing Options	1	24,000
o Assist Wastewater Agencies in Developing Pretreatment Programs	2	<u>10,000</u>
Total		34,000

TABLE A-2. BUDGET SUMMARY OF REMAINING TASKS OF PROPOSED
1979 ABAG SURFACE RUNOFF PROGRAM

TASK	PRIORITY	BUDGET (\$)
<u>Coordinate Surface Runoff Program</u>		
o Develop Surface Runoff Control Financing Programs in <u>Alameda County</u>	2	6,500
o Conduct Public Participation/Educational Programs on Surface Runoff and Other Water Quality Problems in <u>Santa Clara County</u>	3	<u>4,400</u>
Total		10,900
<u>Review and Evaluate Existing Control Measures</u>		
o Develop Litter Control Program in <u>Alameda County</u>	2	22,000
o Develop Hazardous Spills Control Plan for <u>Alameda County</u>	3	8,900
o Investigate On-Site Wastewater Systems in <u>Alameda County</u>	3	68,000
o Monitor Water Quality in <u>Alameda County</u>	3	41,000
o Establish Countywide Litter and Dumping Control Program and Information System in <u>San Mateo County</u>	3	12,700
o Improve Street Sweeping Programs in <u>San Mateo County</u>	2	12,000
o Monitor Water Quality to Guide Development of Control Measures in Identified Special Problem Areas in <u>San Mateo County</u>	3	16,500
o Inventory and Evaluate Erosion Problems in Areas Outside City Limits in <u>Santa Clara County</u>	3	34,000
o Evaluate Effectiveness of State Oil Recycling Program in <u>Santa Clara County</u>	3	2,200
o Develop an Oil Recycling Program in <u>Solano County</u> ; Set Up and Monitor Pilot Program	3	8,800
o Continue Water Quality Monitoring in <u>Green Valley in Solano County</u>	3	12,900
Total		239,000

TABLE A-3. TASKS OF PRIORITIES 1 AND 2

TASK

- A1: Assess Management and Protection of Groundwaters
- A2: Revise Dredging and Spoil Disposal Policy
- A3: Develop Water Quality Management Policy for Alameda Creek Watershed
- A4: Participate in the Plan Development for San Joaquin Agricultural Drainwater Disposal
- A5: Investigate Control Measures for Inland Chemical Spills
- A6: Update the Basin Plan and Integrate it with the EMP
- A7: Develop Governmental and Financing Options
- A8: Assist Wastewater Agencies in Developing Pretreatment Programs
- A9: Develop Surface Runoff Control Financing Programs in Alameda County
- A10: Develop Litter Control Program in Alameda County
- A11: Improve Street Sweeping Programs in San Mateo County

Task A 1

Assess Management and Protection of Groundwaters.

Background

Management practices for groundwater as a finite resource range from nonexistent to highly sophisticated within the Bay Area. Critical to good management is an accurate data base, the quality and availability of which within the region is uneven.

Approach

ABAG with the assistance of the Bay Area Water Resources Council would conduct an assessment of the status and trends of each fresh groundwater basin in the Bay Area, including information on location, water quality, pollution sources, safe yield, assessment of demand, and definition of policies of management agencies. Data deficiencies would be identified. Study would concentrate on groundwater basins other than those used by Alameda and Santa Clara water districts.

Responsible Agencies, Budget & Schedule

RWQCB: 4 person-months

Start date: January, 1979
Completion date: October, 1979

Product

Meetings of Bay Area Water Resources Council, and identification of groundwater basins requiring improved management in order to protect water quality.

Task A 2

Revise Dredging and Spoil Disposal Policy.

Background

The 1972 Amendments to the Federal Water Pollution Control Act (PL 92-500) require state certification of all dredging operations. In California, the State Water Resources Control Board certifies these projects based on the recommendations of the Regional Board. In addition, the State Porter-Cologne Act requires the Regional Boards to consider waste discharge requirements for all dredge spoil disposal operations. In the past the courts have held that the state could not adopt waste discharge requirements for Federal dredging projects. However, with the passage of the 1977 amendments to PL 92-500 (Clean Water Act), Federal projects are now subject to all state and local requirements respecting control of pollution to the same extent as is any non-federal project. The Regional Board now both recommends certification and considers waste discharge requirements for all dredge spoil disposal operations.

The dredging policy currently used by the San Francisco Bay Regional Water Quality Control Board was adopted in 1972 (Resolution No. 72-15). In 1975 EPA developed new dredge material disposal criteria which were incorporated into Regional Board activities in accordance with the Board Policy. EPA is currently drafting nationwide guidelines for the discharge of dredged or fill material into inland waters. In addition, EPA Region IX and the U.S. Army Corps of Engineers San Francisco District are preparing interim guidelines for dredged material disposal.

It is likely that the changes in Federal guidelines and regulations will necessitate a change in the Regional Board dredge policy. Hopefully Federal guidelines will be adequate so that additional regulations by the State are not necessary.

Approach

The revised dredging policy will be developed in two phases. Phase I will consist of review and consideration of the dredged material disposal guidelines developed by EPA-Region IX and the USCE. If, after workshops and a public hearing, those guidelines are found to be appropriate, the Regional Board policy can be amended to reflect those guidelines and no further effort will be necessary. If the Regional Board finds that the EPA/USCE guidelines are not appropriate (not stringent enough), then a considerable amount of additional work will be necessary to develop a revised policy.

Responsible Agencies, Budget & Schedule

Phase I RWQCB: 1 person-month
Phase II (if necessary) RWQCB: 5 person-months

Start date: April, 1979
Completion date: October, 1979

Product

Revised dredging and spoil disposal policy and implementation of revised policy.

Task A 3

Develop Water Quality Management Policy for Alameda Creek Watershed.

Background

The Alameda Creek Watershed above Niles has been an area of critical Regional Board concern for over two decades. To date, the Board's efforts have focused on the three major dischargers in the Livermore-Amador Valley, however, the Board has on several occasions expressed concern over the lack of water quality management planning for the entire watershed.

A water quality management plan is necessary to determine if new discharges should be allowed in the watershed and to provide appropriate management practices to protect the quality of the groundwaters.

Approach

Information concerning the quality of the groundwaters from the Livermore-Amador groundwater basin is presently being gathered as part of the Livermore-Amador Valley Water Management Agency (LAVWMA) Reclamation Study. This information is expected to be available in August 1979. The information will be used by the Regional Board to develop a policy and/or water quality standards for the protection of the groundwaters of the Livermore-Amador Valley.

Responsible Agencies, Budget & Schedule

RWQCB: 1978-79 - 1 person-month
1979-80 - 5 person-months

Start date: July, 1978
Completion date: December, 1979

Product

Water quality management policy for the Alameda Creek Watershed and implementation program.

Task A-4

Participate in the Plan Development for San Joaquin Agricultural Drainwater Disposal.

Background

Extensive agricultural development of the San Joaquin Valley has been made possible by irrigation of the farmlands. The irrigation has created a salt buildup in the soils which can become damaging to plants. Some of this salt, and nutrients, are leaching into, and degrading the San Joaquin River. The collection of the agricultural leachate water and disposal directly into the Bay-Delta system offers a way to protect the valuable agricultural resource of the Central Valley. This disposal, however, must not harm the Bay-Delta system.

Approach

The Interagency Drainage Program is developing a methodology by which the drainage water can be collected and disposed with a minimization of negative impacts. ABAG participates in this program as the 208 Designated Agency representing Bay Area cities and counties. ABAG would assist in presenting a proposed program to Bay Area cities and counties.

Responsible Agencies, Budget & Schedule

ABAG: 3 person-months (\$10,500)

Start date: January, 1979
Completion date: December, 1979

Product

Participation of Bay Area cities and counties in the development of a disposal plan for San Joaquin Valley agricultural drainwaters that would assure protection of the Bay-Delta system. Technical evaluation of proposed plan by ABAG staff on behalf of the ABAG policy body.

Task A 5

Investigate Control Measures for Inland Chemical Spills.

Background

Many oil and chemical spills occur each year in the San Francisco Bay Region. In a recent nine-month period, the Department of Fish and Game reported 255 spills into surface waters. Forty-two percent of these spills were of non-petroleum related chemicals for which clean-up measures are almost non-existent in comparison to those for petroleum spills. Other spills occur directly on land and may readily reach surface waters. The initial 208 plan identified substantial inconsistencies in procedures for preventing and cleaning-up of inland spills. These inconsistencies included questions of responsibility for prevention, responsibility for clean-up, whether clean-up should be attempted, training of personnel, methods of clean-up, and choices between clean-up or flushing chemicals into the nearest watercourse or storm sewer.

Approach

The Environmental Management Plan directs that the SWRCB would establish a task force to investigate toxic substance spills into offshore, bay and estuarine waters of California. The study would concentrate on spills of chemicals other than petroleum. ABAG would provide nominal participation on the task force.

The EMP also directs ABAG to hire a knowledgeable consultant to investigate clean-up and prevention measures for all inland spills of hazardous or toxic substances. This one-time study would produce recommendations for improvement of prevention and clean-up of spills.

Responsible Agencies, Budget & Schedule

ABAG:	2 person-months	(\$ 7,000)
Consultant:		<u>(76,000)</u>
		\$83,000

Start date: January, 1979

Completion date: October, 1979

Product

Recommendations for improved spill prevention and spill clean-up measures. Recommendations may include improvements in assignment of responsibility, specific training programs for clean-up personnel, revised procedures for shipment of chemicals, revised procedures for handling spills, and possible legislation for statewide action.

Task A 6

Update the Basin Plan and Integrate it with the EMP.

Background

The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) was adopted by the Regional Board in April 1975. It is necessary to review the Plan to update it where appropriate. Consideration should also be given to integrating the Basin Plan and the Environmental Management Plan.

Approach

The Regional Board staff will review the Basin Plan and prepare recommended revisions for public hearing. Regional Board and ABAG staff will consider necessary format changes to allow integration of the Basin Plan and the EMP. Staff will participate in development of State policy on plan integration.

Responsible Agencies, Budget & Schedule

RWQCB: 4 person-months
ABAG: 3 person-months (\$10,000)

Start date: January, 1979
Completion date: June, 1979

Product

A single Water Quality Management Plan for the San Francisco Bay Area.

Task A 7

Develop Governmental and Financing Options.

Background

The Environmental Management Plan, as required by law, designates agencies to carry out plan recommendations. The plan indicates that the existing governmental and financing arrangements be maintained for the period up to two years following plan approval. It may be, however, that conditions will change as a result of plan implementation, creating the need for adjustments in our environmental management system. This is why the plan includes actions for developing and proposing governmental and financing mechanisms for planning and implementation beyond the first two years following plan approval.

Approach

ABAG staff has developed a list of governmental arrangement options for long-term environmental management in the Bay Area. Each of these options will be expanded. Management agencies will be surveyed for their opinions of problems with the current system and options they would like evaluated. County surface runoff programs will be reviewed and recommendations made to improve intra-county coordination, responsibility and control measure implementation. In conjunction, options for long-term programs for financing environmental management using a combination of local, State and Federal funds will be developed. ABAG staff will work with the Legislation and Governmental Organization Committee and the Finance and Personnel Committee to develop these options, evaluate them and make recommendations.

Responsible Agencies, Budget & Schedule

ABAG: 6 person-months (\$21,000)
RWQCB: 1 person-month

Start date: January, 1979
Completion date: October, 1979

Product

Technical report with recommendations on how to pay for and implement the plan's control measures as well as how to improve water quality management and financing arrangements.

Task A-8

Assist Wastewater Agencies in Developing Pretreatment Programs.

Background

Toxic materials are suspected as the cause of many adverse effects on aquatic life. Major sources of these materials are non-discrete discharges to municipal sewerage systems. EPA and the RWQCB require that municipal dischargers implement industrial waste pretreatment programs directed at toxic influents not readily amenable to removal in the municipal facility. EPA is in the process of issuing technology based pretreatment requirements for numerous industrial categories. It is difficult for smaller wastewater management agencies to keep abreast of changing requirements, and develop effective pretreatment programs including treatment requirements, regulatory provisions and monitoring programs.

Approach

ABAG would develop model pretreatment ordinances for use by municipal dischargers. The RWQCB would interpret State regulations on pretreatment and identify agencies requiring improved ordinances. ABAG would also provide technical assistance to dischargers in the development of pretreatment programs and in evolving Federal regulations. As a first step, an approach would be developed for use by dischargers in developing their own pretreatment programs.

Responsible Agencies, Budget & Schedule

ABAG: 2 person-months (\$ 7.000)^a
RWQCB: 1 person-months

Start date: October, 1979
Completion date: Continuous

Product

Model ordinance, technical assistance, pretreatment programs in full compliance with EPA and State regulations.

^aIdentification of agencies to be funded by sources other than 208 grant and effort is not included in this budget allocation.

Task A'9 Develop Surface Runoff Control Financing Programs in Alameda County

ISSUE: Implementation of surface runoff controls can be funded by a combination of local and non-local sources. Potential funding is available from many sources e.g., Corps of Engineers, U.S. Geological Survey, Dept. of Water Resources, State Water Resources Control Board and the State Solid Waste Management Board. Local staff time should be made available so information could be gathered regarding grant possibilities.

APPROACH: Staff time from various county departments (e.g., Flood Control, Planning, Health) will be provided to investigate available sources of funding to evaluate and implement surface runoff controls. Information will be obtained regarding eligibility requirements, developing applications and follow-up. This same procedure was used successfully in two recent grant awards in Alameda County: 1) Clean Lakes Grant for Lake Temescal and 2) Castro Valley 208 Demonstration Project.

BUDGET & SCHEDULE

Person months : 2

Product : Written report including grant applications

\$ Cost : \$4,500

Task A10 - Develop Litter Control Program in Alameda County

ISSUE: Litter is not only an aesthetic problem but one that seriously degrades existing water quality. Junk, oil, litter, garbage, trash and other wastes from streets tend to accumulate in storm inlets and catchbasins. There it may cause localized flooding and mosquito habitats. When this material decomposes it depletes the oxygen content of the water.

METHOD: Major litter and dumping problem areas in the County will be identified. A Litter Reduction Study will be developed and conducted by an expert consultant in line with provisions of the California Litter Control Act of 1977. The study will document the litter problem severity and potential benefits to accrue from litter rate reduction. The final report will deal with the County's ability to implement and manage a litter reduction program. Techniques used in the study will include but not be limited to: item counts, vehicle and pedestrian traffic volumes, composition analyses and photometric index analyses. The County Solid Waste Authority will be a participant in the study. This program will be tied into a public education program and will be used to document the cost effectiveness of the expenditure of County SB 650 funds.

BUDGET & SCHEDULE:

Person months : 9

Product : Written report on Feasability of Litter Reduction in Alameda County.
\$ Cost : \$22,000

Task A11 Improvement of street sweeping programs in San Mateo County

ISSUE/PROBLEM:

There is a need to improve the water quality benefit of existing street sweeping programs. A survey of local jurisdictions, covering street sweeping effort, cost and feasibility of equipment sharing, has been completed. Model street sweeping guidelines have been developed (attached). Further development of street sweeping programs is needed, including improved street sweeping guidelines in each local jurisdiction and planning for a cooperative street sweeping program. The passage of Proposition 13 makes consideration of cooperative, equipment-sharing types of street sweeping programs more important.

GENERAL APPROACH:

- o Public Works staffs of the County and each city with an existing street sweeping program will review and consider previously developed street sweeping guidelines (attached) for use in their program.
- o Research on a cooperative street sweeping program will be completed, including an analysis of equipment-sharing and other cost-saving methods.
- o In light of Proposition 13, emphasis will be on how to maximize street sweeping effectiveness while reducing cost.
- o The extent to which equipment sharing and cooperative street sweeping could extend sweeping into areas not now covered will be investigated.
- o This work task will involve the County Planning Division, the Department of Public Works and the cities.

BUDGET AND SCHEDULE:

Person months: 4.8.

Products: Revised street sweeping guidelines in local jurisdictions where found to be feasible. Written report and recommendation on establishment of cooperative street sweeping program and feasibility of equipment sharing.

Cost: \$12,700 (208 funds including local match).

and the environmentalists who are most sympathetic to the concept of sustainable development. As a result, the environmentalists' position on the issue of sustainable development is not as clear cut as the environmentalists' position on the issue of environmental protection. The environmentalists' position on the issue of environmental protection is clear cut, but the environmentalists' position on the issue of sustainable development is not as clear cut as the environmentalists' position on the issue of environmental protection.

The environmentalists' position on the issue of sustainable development is not as clear cut as the environmentalists' position on the issue of environmental protection. The environmentalists' position on the issue of sustainable development is not as clear cut as the environmentalists' position on the issue of environmental protection.

The environmentalists' position on the issue of sustainable development is not as clear cut as the environmentalists' position on the issue of environmental protection.

The environmentalists' position on the issue of sustainable development is not as clear cut as the environmentalists' position on the issue of environmental protection.

The environmentalists' position on the issue of sustainable development is not as clear cut as the environmentalists' position on the issue of environmental protection.

The environmentalists' position on the issue of sustainable development is not as clear cut as the environmentalists' position on the issue of environmental protection.

The environmentalists' position on the issue of sustainable development is not as clear cut as the environmentalists' position on the issue of environmental protection.

The environmentalists' position on the issue of sustainable development is not as clear cut as the environmentalists' position on the issue of environmental protection.

The environmentalists' position on the issue of sustainable development is not as clear cut as the environmentalists' position on the issue of environmental protection.

The environmentalists' position on the issue of sustainable development is not as clear cut as the environmentalists' position on the issue of environmental protection.

The environmentalists' position on the issue of sustainable development is not as clear cut as the environmentalists' position on the issue of environmental protection.

The environmentalists' position on the issue of sustainable development is not as clear cut as the environmentalists' position on the issue of environmental protection.

U.C. BERKELEY LIBRARIES



C101693427